



**MALAMA**  
Environmental

## Environmental Site Assessment: *Phase I Investigation - Pi'ilani Promenade LLC*

Survey Area:

Pi'ilani Highway and Kaonoulu Street  
Approximately 101 acres  
of vacant Ranch land

Pi'ilani Highway and Kaonoulu Street  
South of Ohukai Road  
Kihei, Maui

T.M.K. (2) 3-9-001:016, 169, 170 -174

T.M.K (2) 2-2-002:077

T.M.K. (2) 2-2-002:016 & 082 (portions)

T.M.K. (2) 3-9-001:148 & (2) 3-9-048:122

Prepared for:

**Sarofim Realty Advisors**

8115 Preston Road, Ste. 400

Dallas, Texas 75225

*Attention Mr. Robert Poynor, Vice President*

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STATE OF HAWAII  
LAND USE COMMISSION

Conducted and Compiled by:

Malama Environmental (MEV, LLC)

MEV Project Number #1307-0292

December 17, 2013

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EXHIBIT " F "



**MALAMA**  
Environmental

## Environmental Site Assessment: Phase I Investigation –

**Property:**

***Pi'ilani Highway and Kaonoulu Street***  
***Approximately 101 acres of vacant ranch land***  
Pi'ilani Highway and Kaonoulu Street,  
South of Ohukai Road  
Kihei, Maui, Hawai'i 96753

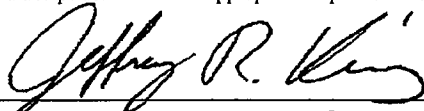
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**Prepared for:**

**Sarofim Realty Advisors**  
8115 Preston Road, Suite 400  
Dallas, TX 75225

Attention Mr. Robert Poynor, Vice President


We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental professional* as defined in §12.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the *subject property*. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

  
\_\_\_\_\_  
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*Senior Geologist*

➤ *Professional Geologist (Indiana)*

12-17-13

**Date**

  
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12-17-13

**Date**

[REDACTED]

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This document contains the results of services performed on this Project by **Malama Environmental (MEV, LCC)** pursuant to Agreement. The results represent the application of a variety of scientific and analytical disciplines that have been rendered using the standard of care, skill, and diligence normally provided by professionals in the performance of similar services under similar circumstances.

**MEV** assessments are intended to reduce, but not eliminate, uncertainty regarding recognized environmental conditions in connection with the Survey area, as conducted within reasonable limits of time and cost. A general consensus of EPA's guidance on landowner liability is that *no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property.*

The use of this document and the results reported are limited to the services performed and areas examined as described in this document and no inferences are intended with respect to anything not described herein.

**MEV** is not responsible for conditions or consequences arising from relevant data, facts, and information that were concealed, missing, withheld, not fully disclosed, or not reasonably available at the time these services were performed. **MEV** is not responsible for any indirect, incidental, or consequential damages of any nature arising from any cause.

**MEV** has no beneficial economic interest in the Project other than as an independent professional organization performing the agreed services. **MEV's** warranties are as described above and there are no other warranties of any kind, expressed or implied, regarding the services.

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## Executive Summary

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### Introduction

This Phase I Environmental Site Assessment (ESA) has been prepared for Mr. Robert Poynor, Vice President of Sarofim Realty Advisors, and was conducted pursuant to Malama Environmental's (MEV's) written proposal and contract accepted by Mr. Poynor on July 12, 2013. This investigation and report format follows the guidelines of the American Society of Testing and Materials (ASTM) Publication E1527-05, which is recognized by 40 CFR Part 312 as an acceptable guidance document for satisfying the EPA's final "All Appropriate Inquiries" rule.

### Site Description

The survey area encompasses approximately 101 acres in north Kihei, Maui, Hawaii, mostly located mauka (toward the mountain) of Pi'ilani Highway (State Highway 31), between the Kihei Commercial Center and Kulanihakoi Gulch and due east of Kaonoulu Street's eastern terminus. Proposed utility easements included in the survey area are located along a gravel lane south of Ohukai Road and extend farther east immediately south of the Monsanto Seed Farm site.

The survey area consists of various parcels of land in their entirety and portions of land parcels, with a total measurement of approximately 101 acres in total area, owned by separate parties.

The survey area encompasses the following Tax Map Key (TMK) parcels: (2) 3-9-001: 016 (Lot 2A), 169 (Lot 2B), 170 (Lot 2C), 171 (Lot 2D), 172 (Lot 2E), 173 (Lot 2F), and 174 (Lot 2G). The survey area also includes TMKs (2) 2-2-002: 077, por. 16, and por. 82 for easement and water tank purposes. Additionally, TMKs (2) 3-9-001: 148 and (2) 3-9-048: 122 (parts of the original larger parcel before subdivision) located across and adjacent to Pi'ilani Highway, are also included for minor improvement purposes.

The total combined parcels and portions of the preceding parcels shall hereby be referred to as the "survey area". The survey area consists of sparsely vegetated vacant land with gulch terrain historically used for cattle grazing and ranching.

Surrounding land use consists of vacant ranch land, agriculture, gulch terrain, retail, commercial, and residential properties. The site is situated on the western slopes of Haleakala Volcano. The community of Kihei surrounds the site to the north, south, and west, with vacant land between the site and the town of Kula further to the east.

### Intended Use of Property

Lots 2A, 2C, and 2D are planned for the Pi'ilani Promenade, a proposed mixed-use development consisting of business/commercial, light industrial, multi-family, and public/quasi-public land uses. Lot 2E is a roadway lot for the future Kaonoulu Street (the first segment of the planned Upcountry Highway), while Lots 2F and 2G are road-widening lots along the Promenade's frontage with Pi'ilani Highway.

Offsite improvements for the Promenade will involve TMK (2) 3-9-001: por. 169 for an irrigation well and waterline easement, TMK (2) 2-2-002: 077 for a water tank site, TMKs (2) 2-2-002: por. 016 and por. 082 for access and utility easements. Additionally, minor improvements will be performed on TMKs (2) 3-9-001: 148 and (2) 3-9-048: 122 located across Pi'ilani Highway.

For example, the gravel lane located immediately south of Ohukai Road is a proposed access utility easement and the eastern extended area located south of the Monsanto Seed Farm is a proposed waterline easement and water tank site.

## Records Review

The purpose of a records review is to obtain and review records that will help identify *recognized environmental conditions* in connection with the subject property. The services of Environmental Data Resources, Inc. (EDR) were utilized to compile the database listings.

*Our records review did not discover any current investigation of the survey area under any programs conducted by a federal, state, or local environmental agency.*

Four (4) potential risk sites, [two are listed as State Hazardous Waste Sites (SHWS) and two are listed as Underground Storage Tank sites (UST)] were identified within a 1-mile radius of the survey area.

The SHWS site Selland Construction, Inc. located at 454 Ohukai Road had a confirmed release in 1994 of diesel fuel and oil due to overflow, equipment maintenance and construction. This area, once called "Ohukai Baseyard", was likely the construction baseyard for the residential subdivision now located immediately north of Ohukai Road, just north of the northern boundary to the proposed utility/roadway easement of the subject property. According to the EDR and the HEER Office, the case number is 19940218 and was given a "low priority" site status. The initial assessment revealed "hazardous conditions" and as of 1994, the area was continually monitored by Haleakala Ranch. According to the HEER Office's response to MEV's inquiry, the case has been listed as "Site On-Scene Coordinator No Further Action" (SOSC NFA). This site did not likely impact the subject property.

Kihei Chevron, located at 1281 S. Kihei Road, is listed as a SHWS but as of 2004 has received a "No Further Action". MEV does not believe this site would have environmentally adversely affected the subject property due to the distance from the survey area and the down-gradient proximity.

The Kihei Minit Stop, located at 233 Piikea Avenue, currently has three (3) in-use diesel and gasoline tanks. Due to the condition of this site (not currently a leaking UST site), it is not expected that this site will negatively impact the environmental condition of the subject property.

The Kihei Shell gas station (NCT, LLC) is located immediately adjacent to the northwestern corner of the survey area. This UST facility was constructed in 2007 and is not listed as a LUST site. Due to the close proximity and the slightly higher elevation of the gas station with respect to the survey area, this facility may pose a negative impact to the environmental condition of the subject property if in the future a leak of the underground storage tanks should occur.

According to the EDR, five (5) historic auto stations exist within the searchable distance from the survey area. These sites did not likely negatively impact the subject property.

## Site Reconnaissance

A site investigation focuses on obtaining information indicating the likelihood of identifying physical *recognized environmental conditions* in connection with the property and assessing the subject property in relation to surrounding land uses and natural surface features. It includes a physical inspection of the real property and any on-site facilities.

On July 23, 2013, MEV geologist, Ms. Amy Mathis conducted an overall site inspection of the survey area. Accessible areas of the property were visually and physically inspected.

**The following are significant observations of field conditions:** (Appendix A, See Figure 2: Site Plan)

- The majority of the subject property was historically used for cattle grazing and ranch land during the ownership of Kaonoulu Ranch. Networks of cattle grazing paths were noted throughout the site.
- The Monsanto Seed Farm is located immediately east and north of the proposed utility and waterline easements.

- A residential lot with diversified crop cultivation exists immediately west of the proposed utility easement south of Ohukai Road. This lot appears to have an associated residential well and retention basin.
- The Kulanihakoi Gulch forms the majority of the southern property boundary. One (1) off-site structure (stream gauging station) is located in Kulanihakoi Gulch approximately 1,000 feet east of Pi'ilani Highway and about 100 feet south of the southern property boundary. Upon inspection no petroleum-product leakage was noted, but the structure has limited loose and flakey paint that could be lead-based.
- Several small fenced corrals were noted on the premises near the southwest corner associated with the cattle ranching operation. Small cement structures and limited water line infrastructure were noted in the cattle corral area.
- A small portion of the survey area located at the northwest corner appeared to be grubbed and graded with a gravel cap. This 0.5-acre area was used in the past as a construction baseyard for the northern adjoining commercial properties and initial development of the Shell gas station.
- Several boulder debris piles were noted near the aforementioned historic baseyard lot. No hazardous substances were noted in these piles.
- A concrete stormwater diversion ditch exists along the western property boundary. Two off-site culverts run beneath Pi'ilani Highway.
- A small-unnamed gulch dissects the northern and central portion of the survey area. It is possible that limited chemical pesticide runoff from the Monsanto Seed Farm may migrate to the survey area via this gulch.
- One (1) on-site well is located immediately north of a sand stockpile in Lot 2B. This well is used for irrigational purposes.
- Two (2) vehicle tires (regulated items) were noted along the northern property boundary just south of the Kihei Commercial center.
- Numerous wind-blown debris consisting of seed cross-contamination bags were noted in the vicinity of Monsanto Seed farm, within the unnamed gulch and along the proposed waterline easement.
- Limited quantities of miscellaneous debris including household refuse, windblown trash and discarded furniture were noted near the northern boundary.
- A perimeter earthen/boulder berm was noted along the northern property boundary creating a 4-6 foot up-gradient berm. A 6-foot to 10-foot boulder terrace is located in the central portion of the survey area.
- Two (2) derelict vehicles were noted along the proposed utility easement south of Ohukai Road.
- Electrical transmission lines run on the south side of Ohukai Road. Three (3) pole-mounted transformers exist just off-site along Ohukai Road. One (1) pole-mounted transformer exists along the distribution line leading to the off-site residential lot south of Ohukai Road. These transformers are non-PCB-containing (according to serial numbers) and are non-leaking.
- The Pi'ilani Promenade baseyard exists in the northeast corner of Lot 2B, just east of the Monsanto Seed farm. The majority of the baseyard consists of drain culvert and piping materials.
- No bulk hazardous/regulated substances are currently stored on-site.

## Conclusions

**Recognized environmental conditions**, as defined by ASTM Standard E1527-05, are the presence or likely presence of any hazardous substance 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.

**Recognized environmental conditions** are described with regard to (1) the nature and extent of the environmental condition, (2) potential or actual environmental threat, (3) potential for transport (migration) of any environmental conditions, and (4) consideration for further investigation. 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.

MEV has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Practice E 1527-05 for the subject property, mostly located mauka (towards the mountain) of Pi'ilani Highway (State Highway 31), due east of Kaonoulu Street, south of Ohukai Road and north of Kulanihakoi Gulch [TMK (2) 3-9-001, parcels 016, 169, 170 – 174, TMK (2) 2-2-002, parcel 077, and 016 & 082 (pors.), TMK (2) 3-9-001: 148 and TMK (2) 3-9-048: 122], in Kihei, Maui, defined as the subject property. Any exceptions to or deletions from this practice are described in Section 1.4, Limitations and Exceptions, of this report.

**This assessment has revealed no evidence of *recognized environmental conditions* in connection with the property.**

- ***Database Listings***

The survey area is not listed.

The listed, nearby risk sites unlikely pose a significant concern to the subject property.

The northern adjoining Shell gas station does not at the present pose a significant environmental concern to the survey area. However, should this facility have any significant leakages occurring with USTs in the future, this site could adversely impact the subject property.

- ***Current and Historic Use or Storage of Hazardous and Regulated Substances***

There is no evidence of any historic misuse or significant spills of hazardous or regulated substances on the subject property. The Hashimoto family historically cultivated crops north of Lot 2B and 2C. The Monsanto Seed Farm is located immediately north of the proposed waterline easement. The use of limited quantities of pesticides is likely associated with crops in these locations. A small, unnamed gulch transects the Monsanto Seed Farm and continues southwest dissecting the survey area in the north-central area and leads toward Pi'ilani Highway. It is possible that during a heavy rain event, runoff from this cultivated area may cause limited pesticide contaminants to enter the subject property.

Aerial photos indicate that agricultural activities occurred north of the subject property from the early 1960s up until the mid-2000s. Presently, limited diversified agricultural activities continue on the residential property located immediately west of the proposed utility/roadway easement off of Ohukai Road. It is unlikely that the operations of this cross-gradient property have significantly impacted the environmental condition of the subject property. Monsanto began seed farming in the late 1990s. All chemicals used by this facility are legal and are listed for farming use.

According to Hawaii Administrative Rules, Chapter 128D Environmental Response Law, the presence of agricultural chemicals, resulting from the legal application of a pesticide product, does not constitute a release of a hazardous substance and is not considered a *recognized environmental condition*.

While the use of pesticides and herbicides on the adjoining property will not necessarily result in adverse impacts to the environmental condition of the survey area, it is possible (yet unlikely) for residual amounts of these substances to accumulate to concentrations that present a potential threat to human health or the environment. However, due to the small scale size of agricultural activity on the northern adjoining lot, and its cross gradient location relative to the subject property, it is unlikely that pesticide levels on the subject property (soil or groundwater) are above regulated levels. Groundwater sampling and laboratory testing would provide additional information to evaluate potential environmental effects from these agricultural activities. A standard proactive procedure, which is recommended by the State Department of Health, would be to conduct such a survey prior to future development of this site, especially any residential development. There is, however, no regulatory requirement to conduct this sampling. Groundwater sampling and

laboratory analyses should be conducted if the groundwater resource is to be used for a potable water source in the future.

*The concerns listed below may not be considered recognized environmental conditions by ASTM definition, however, they may be considered regulated under other environmental laws and ordinances and may present a potential liability to the property owner.*

- ***Solid Waste Management***

A very limited amount of dumping (special waste and miscellaneous debris) was evident on the subject property. Miscellaneous debris includes but is not limited to household refuse, discarded furniture and former irrigation piping. Numerous Monsanto seed cross-contamination prevention bags were noted along the proposed waterline easement and the northeastern portion of the unnamed on-site gulch. Regulated items requiring special management (automobile tires and derelict vehicles) were noted near the northern property boundary and along the proposed utility easement. Management of these wastes needs to be performed in a manner that complies with all local, state, and federal regulations as applicable to the waste type.

Several boulder debris berms and piles were noted on the survey area associated with the northern property boundary. Miscellaneous solid waste items were found within these berms/piles.

Due to limited areas of inaccessible terrain, the entire survey area and underlying soils were not visibly inspected. It is important to note that if additional clearing of the property commences and debris or unidentifiable substances (containers) are further discovered, proper waste identification, testing and applicable waste handling/disposal procedures are followed.

- ***Surface Water and Area Aquifer Protection***

If future land use includes developing the land for residential or commercial use, the developer and property owner should be aware of the potential for contaminants to migrate into any adjacent and proximate drainage ways (including adjacent stormwater concrete culvert which leads west toward Pi'ilani Highway, the on-site unnamed gulch and Kulanihakoi Gulch). Products of concern relating to any future development project or land-clearing activity would be earthen material (silt), paints, oils, antifreezes, and other fluids from automobile or on-site machinery, or leaks from on-site stocked items.

Future land clearing of greater than one (1) acre will likely require both a County of Maui grading/grubbing permit and a National Pollution Discharge Elimination System (NPDES) General Permit (State of Hawaii, Department of Health).

*The concerns listed above are presented as a matter of record. They, collectively or independently, do not have any significant impact on the environment, and are not considered by MEV to devalue the subject property at this time in any way.*

**The conclusions stated above should not be construed to mean that any regulatory agency would have the same opinion as this author, nor is any implication proposed therefrom.**

**The results of this environmental assessment are intended for general reference purposes only and are not intended as legal advice. The advice of legal counsel should be sought in regard to individual facts, circumstances and interpretation of environmental liability.**

## Phase 1 Investigation

A Phase I Environmental Site Assessment (ESA) is conducted to determine if a site may be contaminated with hazardous or toxic substances or wastes resulting from current or past site activities, unauthorized dumping or disposal, or migration of contaminants from adjacent or nearby properties. Its goal is to identify *recognized environmental conditions* on a property that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products. These release conditions apply to structures on the property as well as the soil, groundwater, or surface water of the property. The American Society of Testing and Materials (ASTM) Standard 1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, is used to "...define good commercial and customary practices for conducting an environmental site assessment of a parcel of commercial real estate."

The study objectives are to characterize the environmental setting of the subject property, to identify any obvious activity of environmental concern that may have occurred at or near the site, and to evaluate potential migration pathways for any identified contaminants. It may also address any activities that affect future considerations for potential environmental impairment to the property.

Another function of this Phase I ESA is to conduct an *all appropriate environmental inquiry* in response to the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, the EPA's final rule (40 CFR Part 312), and similar state and local regulations. An ESA "all appropriate inquiry" may provide the buyer, receiver, or lender making a loan secured by the subject real property with a basis to qualify for the *innocent landowner, contiguous property owner, or bona fide prospective purchaser defense* should any legal action be initiated for environmental impairment to the property.

ASTM Publication E1527-05 is recognized by 40 CFR Part 312 as an acceptable guidance document for satisfying the EPA's final "*All Appropriate Inquiries*" rule.

This Phase I Environmental Site Assessment (ESA) has been prepared for Mr. Robert Poynor, Vice President of Sarofim Realty Advisors, and was conducted pursuant to Malama Environmental's (MEV's) written proposal and contract accepted by Mr. Poynor on July 12, 2013.

There were no other additional services requested of MEV by the Client.

The assessment of *recognized environmental conditions* relies on: 1) sources of actual knowledge, 2) thorough appropriate inquiry, 3) reviewing reasonably ascertainable documents and records, and 4) conducting a visual and olfactory reconnaissance. In conducting this ESA, MEV has relied on the truthfulness of its inquiry sources and the validity of reviewed records. If obvious indications or MEV actual knowledge contradicted the reported/reviewed information sources, it has been so stated in the appropriate sections of this report.

The investigation performed for this report includes the components of an *all appropriate inquiry* regarding the potential for contamination to exist or have occurred at this site. This investigation is also the basis of an *all appropriate inquiry* into the presence or likely presence, release or threatened release, of hazardous substances and petroleum products at this real property. As indicated earlier, this Phase I Environmental Site Assessment was prepared according to guidelines presented in (ASTM E-1527-05).

Since no ESA can eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a property, the limiting intent of this investigation is to reduce the uncertainty to an appropriate level. Minimal requirements for the Phase I ESA include a review of historical records, a review of files and databases compiled by regulatory agencies, interviews with current owners and/or occupants of the property, and a field reconnaissance of the survey area and adjacent areas.

This ESA also takes into consideration the evaluation of other substances and products that are or may be interpreted as excluded under CERCLA. Commonly, these substances are of concern in commercial real estate transactions under current custom and usage and may include, but are not limited to, Radon, Lead-in-Drinking Water, and Special Environmental Resources. Where appropriate, MEV has considered environmental concerns of other federal, state, and local regulations.

Some database resources developed for Maui County are not readily attainable in a useful form or are not cross-referenced in a manner as to be readily discernible. The Maui County Fire Department maintains an electronic database that dates back to January 2000. Information and records prior to 2000 exist on file, as hardcopies, at the Department of Fire and Public Safety Office.

Databases and records utilized for this investigation were limited to those that are reasonably ascertainable; that is, they had to be publicly available, obtainable from its source within reasonable time and cost constraints, and practically reviewable with regard to volume, sorting, and organization. Additionally, the services of *Environmental Data Resources, Inc.* (EDR) were utilized to compile the environmental database listings. See Appendix B.

MEV did not encounter any significant *data gaps* during the course of this Phase I ESA Investigation that would affect the ability of the *Environmental Professional* to identify *recognized environmental conditions* pertaining to the subject property.

As a standard practice, a confidential client privilege was initiated by MEV for the work performed and contents of this report. MEV shall ensure that its officers, employees, agents, and independent contractors do not disclose this report or any information contained therein to any person without the proper knowledge and written consent from the Client (or as otherwise required by law). MEV shall ensure that each of its officers, employees, agents, and independent contractors understand and obey these requirements.

The information and opinions provided herein are intended as background data and planning guidance to interested parties. This should not be construed to mean that any regulatory agency would have the same opinion as MEV, nor is any implication proposed.

MEV has performed this study in a competent and professional manner. Since there may be hidden or unknown conditions that may be missed during this inspection, MEV cannot warrant the actual site conditions described in this report.

Refer to Figure 1, Regional Setting Map, in Appendix A, for a depiction of the general setting of the survey area in relation to topographic features. Also depicted are the projected groundwater flows, regional surface water flows, and locations of other significant physical features or structures. A regional aerial photo Figure 2 - Site Plan and Figure 3 - Tax Map Key are also located in Appendix A.

The majority of the survey area is located mauka and east of Pi'ilani Highway (State Highway 31), between the Kihei Commercial Center and Kulanihakoi Gulch and due east of Kaonoulu Street. The proposed utility easement is located due south of Ohukai Road. The proposed waterline easement located immediately south of the Monsanto Seed Farm extends farther east of the main portion of the survey area. The survey area is located in the northern portion of Kihei, Maui, Hawaii. The survey area encompasses the following Tax Map Key (TMK) parcels: (2) 3-9-001: 016 (Lot 2A), 169 (Lot 2B), 170 (Lot 2C), 171 (Lot 2D), 172 (Lot 2E), 173 (Lot 2F), and 174 (Lot 2G). The survey area also includes TMKs (2) 2-2-002: 077, por. 16, and por. 82, TMK (2) 3-9-001: 148, and TMK (2) 3-9-048: 122. Two property access points are associated with the survey area. One is located from the south side of Ohukai Road across from Hale Kai Street and the other is a gated entry, centrally located along the western property boundary, east of Pi'ilani Highway. (See Figure 3, Tax Map, Appendix A.)

The survey area consists of various parcels of land in their entirety and portions of parcels, with a total measurement of approximately 101 acres in total area.

The site is situated on the western slopes of Haleakala Volcano. The town of Kihei surrounds the site to the north, south, and west, with vacant ranch land between the site and Kula to the east. The Property consists of sparsely vegetated vacant land with gulch terrain historically used for cattle grazing and ranching.

Topography of the property is varied, but generally slopes from east to west. The survey area is at elevations ranging from 25 feet at the southwestern corner near Pi'ilani Highway to 75 feet in the northwest corner and rises to 137 feet along Ohukai Road and 230 feet at the far eastern boundary. The nearest prominent natural features are Kulanihakoi Gulch, which lies just south of the southern boundary and the Pacific Ocean which is located approximately 2,600 feet west of the survey area at its closest point. (See Figure 1, Appendix A.)

Surrounding land use consists of fallow agricultural land, a residential homesite, Kihei Commercial Center, Shell gas station and the Monsanto Seed Farm all located immediately north of the northern property boundary; undeveloped cattle ranch land to the east and south; Kulanihakoi Gulch to the south; and the Pi'ilani Highway to the west. Residential homes exist beyond Pi'ilani Highway farther to the west and north of Ohukai Road.

The subject property is predominantly undeveloped vacant ranch land. A limited, unpaved road network exists on-site, most notably an unpaved road traversing from the southwestern corner to the northern portion of the eastern boundary. This road marks the division between Makawao District and Wailuku District. ("District" refers to a zone marked off for administrative or other purposes.) A secondary unpaved road runs along the western boundary line of the survey area and along the southern portion of the eastern boundary. Post and wire fences run along the southern property boundary and within the interior of

the survey area. A concrete stormwater diversion ditch exists along the western property boundary adjacent to Pi'ilani Highway. A grubbed/graded 0.5 acre portion located at the northwest corner and directly south of the off-site Shell gas station exists on the premises. This lot was historically used as a baseyard to support the construction activity that took place during the mid-2000s on the northern adjoining property. A cattle corral was noted in the southwestern portion of the property. Small cement structures and limited water line infrastructure were noted in the cattle corral area. One (1) irrigation well is located within Lot 2B just north of the stockpiled sand. A construction dust-prevention fence lies along the western property boundary, installed by Goodfellow Bros, Inc. for upcoming construction activities. An irrigation waterline was noted running parallel to the proposed utility/roadway south of Ohukai Road. This waterline likely supplies Monsanto with crop irrigation water provided by the County of Maui. Electrical transmission lines exist along the south side of Ohukai Road. The remainder of the subject property is predominately undeveloped and no significant structures were noted. See Figure 2: Site Map, Appendix A.

The survey area consists of approximately 101 acres of undeveloped grazing land, which consists predominately of sparse vegetation (mature trees, tall grasses, and small shrubs). Cattle were not noted by MEV at the time of the site visit and it appears that the survey area is no longer used for cattle ranching. Currently, the northeast corner of Lot 2B is used by Pi'ilani Promenade as a baseyard. Monsanto currently uses the proposed utility and waterline easements for seed farm site access.

The current uses of the adjoining properties as observed by the investigator during the site reconnaissance are as follows (see also Figure 2 Site Plan, in Appendix A):

▪ <i>Northern Adjoining Property:</i>	Shell gas station, Kihei Commercial Center (commercial building complex), fallow agricultural land, former cattle ranching land, residential agricultural land, and the Monsanto Seed Farm site. Residential properties are located north of Ohukai Road.
▪ <i>Eastern Adjoining Property:</i>	Undeveloped vegetated ranch land (cattle grazing).
▪ <i>Southern Adjoining Property:</i>	Kulanihakoi Gulch and undeveloped ranch land (cattle grazing).
▪ <i>Western Adjoining Property:</i>	Pi'ilani Highway, beyond which lies residential homes, and vacant land. A residential homesite with limited diversified crop cultivation is located west of the proposed utility/roadway easement.

[REDACTED]

As a standard of practice, the following information was requested from the Client during the preliminary phases of this investigation:

- Title records and knowledge of environmental liens or activity and land use limitations (AULs);
- Personal, specialized knowledge or experience in regard to *recognized environmental conditions* concerning the property; and
- If applicable, actual knowledge of a significant, low purchase price for the property, and explanation for the lower price.

The purpose of this information is to help identify the possibility of *recognized environmental conditions* in connection with the property. These tasks do not require the technical expertise of an environmental professional and are generally not performed by environmental professionals performing the Phase I ESA. MEV submits a Preliminary Environmental Investigation questionnaire to the Client for this information. The completed questionnaire is attached in Appendix B.

According to information provided by the client-representative in the Preliminary Environmental Investigation, the client-representative is not aware of any environmental liens, proceedings, or investigations against the subject property as of the date of this ESA.

[REDACTED]

The purpose of a record review is to obtain and review records that will help identify *recognized environmental conditions* in connection with the subject property. The service of Environmental Data Resources, Inc. (EDR) was utilized to compile the database listings.

The subject property and properties within the minimum search distances were reviewed from the following record sources (see below). Risk sites, if any, that may be located on or adjacent to the subject property, or are within close proximity to the survey area are described. Refer to Appendix B, EDR Radius Map Report, for a complete listing and description of all sites located within the designated search distances, details, and government agency database release dates.

The EDR Report bases the location of the listed risk sites on longitude/latitude information provided by the respective government agency. MEV confirms the locations of risk sites within close proximity to the survey area during the site visit. When the MEV site visit contradicts the EDR Report, it has been so stated.

ASTM E-1527-03 EDR Sources and Recommended Search Distances	
EDR SOURCES	ASTM STANDARD SEARCH DISTANCES (miles)
Federal NPL Site List	1.0
Federal CERCLIS List	0.5
Federal CERCLIS NFRAP Site List	0.5
Federal RCRA CORRACTS Facilities List	1.0
Federal RCRA Non-CORRACTS TSD Facilities List	0.5
Federal RCRA Generators List	0.25
Federal ERNS List	Target property only
State & Tribal – Equivalent NPL	1.0
State & Tribal – Equivalent CERCLIS	0.5
State & Tribal Landfill and/or Solid Waste Disposal Sites	0.5
State & Tribal LUST Sites	0.5
State & Tribal UST Sites	0.25

**THE TARGET PROPERTY (SURVEY AREA) IS NOT LISTED ON ANY OF THE FOLLOWING FEDERAL OR STATE DATABASE LISTINGS OF THE EDR REPORT.**

***Federal Database Listings***

**National Priorities List (NPL or Superfund) and Proposed NPL, EPA.** The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. The Survey area is not listed as an NPL site. Additionally, the EDR report indicates no listings within a 1-mile radius of the Survey area.



**Comprehensive Environmental Response, Compensation and Liability Information System List (CERCLIS), EPA.** The CERCLIS list contains data on potentially hazardous waste sites that have been reported to EPA by states, municipalities, private companies and private persons, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites that are either proposed to or on the NPL and sites, which are in the screening and assessment phase for possible inclusion on the NPL. The Survey area is not listed as an NPL site. Additionally, the EDR report indicates no listings within a 0.5-mile radius of the Survey area.

**CERCLIS – No Further Remedial Action Planned (NFRAP), EPA.** 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. The Survey area was not identified as a CERCLIS NFRAP site. Additionally, the database did not identify any CERCLIS NFRAP sites within a 0.5-mile radius.

**RCRA CORRACTS, EPA.** The CORRACTS report lists hazardous waste handlers with RCRA corrective action activity. The Survey area was not listed as a CORRACTS facility. There are no CORRACTS sites within the recommended search distance of 1-mile.

**RCRA (Non-CORRACTS) TSD Facilities.** The EPA's RCRA program identifies and tracks hazardous waste from the point of where it was generated to the point of final disposal. The RCRA Treatment, Storage or Disposal (TSD) facility database compiles those reporting facilities that treat, store, or dispose of hazardous waste. The Subject Property is not listed as a RCRA TSD facility. The database did not identify any RCRA TSD facility within the appropriate search radius of 0.5-mile.

**Resource Conservation and Recovery Information System (RCRIS), EPA/NTIS.** RCRIS includes selective information on sites that generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). The Federal RCRA Generator list includes Large Quantity Generators (LQG), facilities which generate more than 1000 kilograms (kg)/month of hazardous waste, Small Quantity Generator (SQG), facilities which generate less than 1000 kg but more than 100 kg/month and Conditionally Exempt Small Quantity Generator (CESQG), facilities which generate less than 100 kg/month. The Survey area was not listed as a RCRA-LQG, SQG or CESQG. The database did not identify any RCRA generator facilities within the appropriate search radius of 0.25-mile.

**Emergency Response Notification System (ERNS), EPA/NTIS.** Records and stores information on reported releases of oil and hazardous substances. The database contains information regarding the discharger, release date, material, amount released, incident location and release action taken. The Survey area is not listed as an ERNS facility.

#### ***State of Hawaii Database Listings***

**Sites List State Hazardous Waste Branch (SHWS), DOH.** A list of facilities, sites, or areas in which the Office of Hazard Evaluation and Emergency Response (HEER) has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites). The Survey area was not identified as a SHWS. The EDR report indicates two (2) SHWS facilities within the 1-mile search radius from the Target Property.

S-IWS Review			
Facility Name and Address	Distance (miles)/Direction	Discussion	Conclusion
Selland Construction, Inc. 454 Ohukai Road	½-1 NE	This site had a confirmed release in 1994 of diesel fuel and oil due to overfill, equipment maintenance and construction. This area, once called "Ohukai Baseyard" was likely the construction baseyard for the residential subdivision now located approximately 0.25-mile north of the subject property. The initial site assessment found hazardous conditions and as of 1994, Haleakala Ranch monitored the site. Approximately 2-feet of gravel were to be removed and remediated. According to the EDR and the HEER Office, the case number is 19940218 and was given a "low priority" site status.	Due to the distance and the status with the DOH, it is unlikely that this facility has impacted the survey area and is not considered a REC at this time. According to the HEER Office's response to MEV's inquiry, the case has been listed as "Site On-Scene Coordinator No Further Action" SOSOC NFA. This area now consists of a residential subdivision further indicating that the listed incident has been cleaned up.
Kihehi Chevron 1281 S. Kihehi Road	1-mile SSW	This site had a confirmed release of a petroleum product at the service station. As of February 2004, the site was properly remediated and awarded a "No Further Action, no hazard for unrestricted residential use".	Due to the distance, elevation status (lower gradient), and the status with the DOH, it is unlikely that this facility has impacted the survey area during the release and is not considered a REC at this time.

**Permitted Landfills in the State of Hawaii (SWF/LF), DOH.** An inventory of solid waste disposal facilities or landfills in the State of Hawaii. 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. The Survey area is not listed. Additionally, the EDR report indicates no listings within the 0.5-mile search radius of the Survey area.

**Leaking Underground Storage Tank (LUST) database, DOH.** An inventory of reported leaking underground storage tank incidents. The Survey area is not listed as a LUST site. The EDR report indicates no listings within the 0.5-mile search radius of the Survey area.

**Underground Storage Tank (UST) database, DOH.** USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with DOH. The Subject Property is not listed as a UST facility. The EDR report currently has two (2) listed UST facilities located within the appropriate search radius of 0.25-mile from the Survey area.

- ✓ *NCT LLC (Shell Station) – 30 Manao Place (Facility ID# 9-503832):* This site is listed as having two (2) gasoline tanks (12,000 and 7,000 gallon tanks), and one (1) 4,000 gallon diesel tank. This site was constructed in 2007 and is located immediately adjacent to the northwestern corner of the survey area. Currently, this facility is not listed as a Leaking Underground Storage Tank (LUST) site. Due to the close proximity and the slightly higher elevation of the gas station with respect to

the survey area, this facility may pose a negative impact to the environmental condition of the subject property if in the future a leak of the underground storage tanks should occur.

- ✓ *Kihei Minit Stop* – 233 Piikea Avenue (Facility ID# 9-503629): This site is listed as having two (2) gasoline tanks (10,000 and 6,000 gallon tanks), and one (1) 4,000-diesel tank. This site is currently not listed as a LUST site. Due to the distance from the survey area and the current listing with the DOH, this site is not anticipated to negatively impact the subject property at this current time.

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

*Five (5) Historical Auto Stations were found within the searchable distance compared to the survey area. Due to the current status of these historic stations (all non-LUST sites) and the distance from the subject property, these sites did not likely negatively impact the subject property.*

The subject property and properties within the minimum search distances were reviewed from the following record sources. Refer to Appendix B, EDR Radius Map Report, for a complete listing and description of all sites located within the designated search distances, details, and database release dates.

#### ***Federal Database Listings***

- ▼ **Superfund (CERCLA) Consent Decrees (CONSENT), EPA Regional Offices.** Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites.
  - *The survey area is not listed.*
  - *The EDR Report indicates no listings within the one-mile search radius of the survey area.*
- ▼ **Records of Decisions (ROD), EPA.** ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.
  - *The survey area is not listed.*
  - *The EDR Report indicates no listings within the one-mile search radius of the survey area.*
- ▼ **National Priority List Deletions (De-listed NPL), EPA.** A list of sites that have been deleted from the NPL where no further response is appropriate.
  - *The survey area is not listed.*
  - *The EDR Report indicates no listings within the one-mile search radius of the survey area.*
- ▼ **Facility Index System/Facility Identification Initiative Program Summary Report (FINDS), EPA.** Contains both facility information and 'pointers' to other sources that contain more detail.
  - *The survey area is not listed.*
- ▼ **Hazardous Materials Information Reporting System (HMIRS) DOT.** A list of hazardous material spill incidents reported to DOT.
  - *The survey area is not listed.*

- ▼ **Material Licensing Tracking System (MLTS), Nuclear Regulatory Commission (NRC).** A list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements.
  - *The survey area is not listed.*
- ▼ **Mines Master Index File (MINES), Department of Labor, Mine Safety and Health Administration.** Contains both facility information and 'pointers' to other sources that contain more detail.
  - *The survey area is not listed.*
  - *The EDR Report indicates no listings within the ¼-mile search radius of the survey area.*
- ▼ **Federal Superfund Liens (NPL Liens), EPA.** A list of properties whereby the EPA has filed liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability.
  - *The survey area is not listed.*
- ▼ **PCB Activity Database System (PADS).** Identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required to notify EPA of such activities.
  - *The survey area is not listed.*
- ▼ **RCRA Administrative Action Tracking System (RAATS), EPA.** A historical archived database containing records on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by EPA. The database was discontinued on September 30, 1995.
  - *The survey area is not listed.*
- ▼ **Toxic Chemical Release Inventory System (TRIS), EPA.** A list of facilities which release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313.
  - *The survey area is not listed.*
- ▼ **Toxic Substances Control Act (TSCA), EPA.** Identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list.
  - *The survey area is not listed.*
- ▼ **Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA)/TSCA Tracking System (FTTS INSP and FTTS), EPA – Office of Prevention, Pesticides and Toxic Substances.** FTTS tracks administrative cases, pesticide enforcement actions, and compliance activities related to FIFRA, TSCA, and Emergency Planning and Community Right-to-Know Act (EPCRA).
  - *The survey area is not listed.*

#### *State of Hawaii Database Listings*

- ▼ **Release Notifications (SPILLS), DOH.** Releases of hazardous substances to the environment reported to the HEER Office. The following databases are included in the HEER Spill List:
  - Release Notification Report: a compilation of releases reported to HEER.
  - Hawaii Emergency Planning and Community Right-to-Know Act (HEPCRA): a list of facilities that have submitted Tier II and Form Rs as a reporting requirement.
  - *The survey area is not listed.*
  - *The EDR Report indicates no listings within the one-mile search radius of the survey area.*

▼ **Registered Wells and Dry Wells, DLNR.** (See Section 5.5.6)

- ✓ One (1) registered well is listed for the subject property. The well is owned by Kaonoulu Ranch and is listed as "Kaonoulu Irrigation 1". This well is used for irrigational purposes only, and will remain in use for irrigation for the upcoming construction project.

According to the EDR, twenty-two (22) wells exist within the searchable distance of 1-mile from the survey area. Eighteen of these well are used for irrigation, one is used for agricultural purposes, one is unused at this time and two are listed as "other". (See the EDR in Appendix B for more details.)

- ▼ **Air Quality Permit, DOH.** Current activities conducted on-site do not require an air quality permit.
- ▼ **Storm Water Discharge (NPDES) Permit, DOH-CWB.** The proposed construction activities for the survey area require a NPDES permit. A concrete stormwater drainage diversion ditch exists on the survey area along the western property boundary indicating that stormwater runoff will enter navigable waters. The unnamed gulch on the survey area also leads toward the concrete ditch. The immediately adjacent Kulanihakoi Gulch also carries runoff toward the Pi'ilani Highway culvert system. Pi'ilani Promenade was awarded a NGPC (Notice of General Permit Coverage) from the DOH. This permit expired as of October 21, 2012. However, Pi'ilani Promenade has filed for an extension and this was granted by the DOH.

***County and Other Database Listings***

Other local records of environmental interest that were reviewed or considered for review by MEV included:

- ▼ **Fire Department, County of Maui.** The Maui County Fire Department (MCFD) maintains file material that is not on a database. MCFD was contacted for an inquiry on the subject property. MEV did not receive a response from MCFD regarding any incidents on the survey area.
- ▼ **Grading/Grubbing Permit, County of Maui.** A grading permit is currently open for the subject property for (2) 3-9-001:016, 170 and 171. The permit number is G 20120039 and was issued April 12, 2012 and expires April 18, 2014. Future land clearing of greater than one (1) acre requires this County of Maui grading/grubbing permit.
- ▼ **Hazardous Waste Disposal Documents.** MEV did not review any hazardous waste disposal documents.
- ▼ **Maui Electric Company.** Maintains records on county power transformers regarding PCB-containing equipment and equipment maintenance. No pad or pole-mounted electrical transformers were observed on the subject property. Electrical transmission lines exist along the south side of Ohukai Road. Three (3) pole-mounted transformers are located along these lines immediately adjacent to the northern property boundary of the utility/roadway easement. One (1) pole-mounted transformer exists west of the utility/roadway easement, associated with a residential homesite. The transformers in question are not PCB-containing (according to serial identification numbers) and are not currently leaking.
- ▼ **Other Environmental Reports.** Environmental site assessment reports were previously completed by Vuich Environmental Consulting (VEC) for the subject property (VEC Phase I ESA dated August 2004 and April 2006). MEV conducted a Phase I ESA in close proximity to the survey area (MEV Phase I ESA Kihei North Master Plan dated April 2010). MEV reviewed all of these reports as valuable historic resources for the subject property and surrounding land.
- ▼ **Planning & Zoning, County of Maui.** According to the Maui County Department of Planning, the survey area's zoning for Lots 2A through 2D is M-1, "light industrial". The zoning for the remaining parcels is considered State Agricultural. The survey area is **not** within the boundaries of the Special Management Area (SMA). The SMA boundary in this area runs parallel to Pi'ilani Highway.

▼ **Property Tax Office, County of Maui.** The Maui County Property Tax Office maintains records of past ownership, maps, sketches and other information as it pertains to the subject property. (See also Section 8.0). According to Maui County Tax Office as of July 23, 2013, the current property owners are listed as the following:

(2) 3-9-001: 169 Lot 2B	Honua'ula Partners LLC
(2) 3-9-001:016 Lot 2A	Pi'ilani Promenade North LLC
(2) 3-9-001: 170-174 (Lots 2C thru 2G)	Pi'ilani Promenade South LLC
(2) 2-2-002: 016	Haleakala Ranch Company
(2) 2-2-002: 082, 077	Kaonoulu Ranch
(2) 3-9-001: 148	State Department of Transportation
(2) 3-9-048: 122	State Department of Transportation

▼ **Wastewater Discharge Permit, County of Maui.** MEV did not identify any wastewater discharge permits registered to the subject property.

The following sources were reviewed for physical setting information (refer to Section 8.0 for a complete listing):

- Atlas of Hawaii;
- Civil Defense Tsunami Evacuation Map;
- Geologic and Topographic Map (Hawaii Atlas & Gazetteer);
- Groundwater Map and Water Quality Plan for State of Hawaii;
- U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, HI;
- U.S. Geological Survey, 7.5 Minute Topographic Map, Pu'u O Kali Hawaii 1983 & 1992.

These data sources were used to provide information regarding physical characteristics of the survey area and surrounding area. This information is typically used in analysis of potential geological trends, which might impact environmental conditions of the survey area. Note that this investigation is not intended to identify geologic hazards associated with the subject property.

The following historical data sources were reviewed for this report (refer to Section 8.0 for a complete listing):

- Aerial Photographs;
- Department of Planning and Zoning, County of Maui;
- Maui County Fire Department (Fire Prevention Bureau / Hazardous Materials Division);
- Maui County Real Property Tax Records;
- Personal Interviews;
- Sanborn Maps (not available for this location);
- State of Hawaii, Department of Health, Environmental Management Division;
- Environmental Data Resources (EDR);
- Client-supplied survey area and regional vicinity maps;
- VEC Phase I ESA reports dated 2004 and 2006;
- MEV Phase I ESA – Kihei North Master Plan report dated April, 2010.

*Historic Aerial Photographs*

A series of aerial photographs with coverage of the subject property and surrounding area were examined. See Figure 2 – Site Plan, Appendix A, for clarification of specific location. MEV did not observe any features on aerial photographs examined that would suggest the presence of significant vegetative stress, soil staining, or bulk storage of chemicals such as drums or tanks.

<p>2/28/1950 No Scale Provided</p>	<p>SS:  N, E, S, W:  RG:</p>	<p>Undeveloped, vegetated land. An unnamed watercourse transects the property in a northeast to southwest direction. Kulanihakoi Gulch is visible along the southern property boundary;  Undeveloped, vegetated land;  Undeveloped, vegetated land; Kulanihakoi Gulch visible; South Kihei Road visible as an unpaved roadway. The sparsely populated community of Kihei is present west of the site.</p>
<p>6/2/1964 No Scale Provided</p>	<p>SS:  N:    E, S, W:  RG:</p>	<p>No significant changes noted except that more vegetation appears to be present. Pi'ilani Highway established as an unpaved road west of the subject property.  Ohukai Road exists as an unpaved lane. Agricultural development (orchards and diversified agriculture) and the addition of a small water tank and retention pond is located west of the proposed utility/roadway and north of Lots 2A and 2B. Rectangles resembling crop areas are present at the location of the present-day Monsanto corn farm located just north of the unnamed gulch. These crop rectangles are part of the Hashimoto residential diversified agricultural farm. Initial construction of a residential development is located farther to the north;  No significant changes noted;  Two street loops and several homes have been constructed in the location of the present day Ohukai Road neighborhood. Agricultural parcels remain immediately west of the present-day Monsanto farm and north of the survey area.  The town of Kihei has expanded slightly west of the survey area and the addition of new roads is noted.</p>
<p>10/25/1982 No Scale Provided</p>	<p>SS:  N:  E: S: W: RG:</p>	<p>A Stormwater diversion ditch is noted along the western property boundary of Lot 2A. Two limited access unpaved roads are noted: one on the western boundary line, and the other transecting the subject property (northeast to southwest). The diagonally transecting dirt road is the division line between the Makawao District and the Wailuku District;  Agricultural activities remain. The crop rectangles have been expanded south of the unnamed gulch and parallel the proposed waterline easement. Completed residential development noted further to the north;  No significant changes noted. Large water tank now located farther to the northeast;  No significant changes noted;  More residential and commercial structures noted west of Pi'ilani Highway;  The Ohukai Road neighborhood has been constructed with several streets and tens of homes.  The community of Kihei continues to expand west of the site.</p>
<p>10/27/90 No Scale Provided</p>	<p>SS:  N:    E, S: W: RG:</p>	<p>A network of storm water infrastructure has been added near the western boundary of the subject property adjacent to Pi'ilani Highway. Corral enclosures are noted near the southwestern corner. The proposed waterline easement is not shown in this photo;  Ohukai Road is now paved. The orchards once located in the northern adjoining property along Pi'ilani Highway appear fallow. Extensive commercial development noted in place of former crop areas. Diversified crop cultivation remains east of the commercial development zone. Crop rectangles east of the proposed utility easement appear fallow;  No significant changes noted;  No significant changes noted except for increased residential development;  Increasing commercial and residential development; addition of new roads noted.</p>

<p>9/27/96 No Scale Provided</p>	<p>SS: N: E, S: W: RG:</p>	<p>No significant changes noted except that the unpaved road that transected the subject property is more difficult to see; Kihei Commercial Center is now complete. Agriculture activity remains just west of the proposed utility/roadway, but appears fallow farther west and east of this spot. The Ohukai Road neighborhood has been expanded with more streets and homes. No significant changes noted; Construction of residential subdivision west of Pi'ilani Highway is complete. The town of Kihei continues to expand west of the site.</p>
<p>Google Earth™ 2013</p>	<p>SS: N: E, S: W: RG:</p>	<p>Gravel lot exists in the northwest corner of Lot 2A. The Pi'ilani Promenade baseyard is stationed in the northeast corner of Lot 2B. Numerous unpaved roads exist within the subject property. A sand stockpile is located just south of the baseyard. Boulder berms can be seen on the premises likely from remnant grubbing and grading. Kihei Commercial Center and the Shell gas station. Agricultural activities remain to the north. Monsanto is actively seed farming the crop rectangles remnant from the Hashimoto farm located just north of the proposed waterline easement. No significant changes noted; Increased residential development; The community of Kihei continues to develop.</p>



Information regarding the storm water flow, property layout, physical characteristics, and adjoining property conditions are presented in Figure 2, Site Plan, and site photographs located in Appendix A.

A site investigation focuses on obtaining information indicating the likelihood of identifying *recognized environmental conditions* in connection with the property and assessing the subject property in relation to surrounding land uses and natural surface features. It includes a physical inspection of the real property and any on-site building structures.

On July 23, 2013, MEV geologist Ms. Amy Mathis conducted an overall site inspection of the survey area. The method used to observe the subject property included: (1) walking the approximate perimeter of the subject property where accessible, (2) inspecting the interior of the subject property, (3) inspecting the on-site gulch terrain, (4) conducting random and non-random traverses of the subject property and (5) inspecting all areas of potential storage areas for possible hazardous substances (baseyard). Some of the property perimeter boundaries were effectively defined by survey flags and boundary corner pins. Where boundaries were not physically defined, MEV was able to locate boundaries with the use of geographical features, aerial photos and GPS.

Certain physical obstructions limited the investigator from total property observations of native surface soils. Areas of dense vegetation located on-site, especially in the gulch areas, obscured the underlying surface soils. A limited portion of the survey area's total surface soils was not observable due to the presence of boulder and sand piles. Exposed soils that were observable did not exhibit evidence of gross surface contamination.

*Any environmental conditions reported here are not intended to include minimal conditions that 1) generally do not present a material risk of harm to public health or the environment and 2) generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.*

### 5.2.1 Current and Past Use(s) of the Property

#### *Current Uses*

According to the Maui County Tax Office, the current property owners are listed as follows:

(2) 3-9-001: 169 Lot 2B	Honua'ula Partners LLC
(2) 3-9-001:016 Lot 2A	Pi'ilani Promenade North LLC
(2) 3-9-001: 170-174 (Lots 2C thru 2G)	Pi'ilani Promenade South LLC
(2) 2-2-002: 016	Haleakala Ranch Company
(2) 2-2-002: 082, 077	Kaonoulu Ranch
(2) 3-9-001: 148	State Department of Transportation
(2) 3-9-048: 122	State Department of Transportation

The survey area consists of approximately 101-acres of land combining the parcels and parcel portions listed above.

The land is predominately undeveloped and is no longer used for cattle grazing. A portion of the northeast corner of Lot 2B is currently being used as a baseyard for the Pi'ilani Promenade and contains the water well and small head tank. No hazardous/regulated materials are currently being stored within the baseyard. Pi'ilani Promenade Parcels 172 (proposed Kaonoulu Street), 173, and 174 (along Pi'ilani

Highway) will be dedicated to the State of Hawaii. The portion of Haleakala Ranch Parcel 016 will be used as the utility and access easement from Ohukai Road to the site. Monsanto currently uses the proposed utility and waterline easement (Kaonoulu Ranch Parcel 082 portion) for seed plot access. The State Department of Transportation (SDOT) Parcels 148 and Parcel 122 (across and adjacent to Pi'ilani Highway and adjacent to Kaonoulu Street) will have minor improvements performed. Information presented here represents those items visually or physically observed or identified in the interviews or records review.

#### *Past Uses*

Historically, the property was vacant dating back to at least 1950, the earliest aerial photograph reviewed. According to the County of Maui Real Property Tax information, Kaonoulu Ranch has owned portions of the survey area for many decades for the purpose of pastureland for cattle. An interview with the previous property owner, Mr. Doug Peterson of Kaonoulu Ranch, informed MEV that the subject property was owned by Kaonoulu Ranch since 1916 and had only been used for cattle grazing and ranch land since the 1800s. Haleakala Ranch owned other areas of the main portion of the survey area. In 2005, the property currently consisting of Lots 2A, 2C, 2D and 2E was sold to Maui Industrial Partners, LLC. In the mid-2000s, a 0.5 acre portion of the property (northwest corner) was used as a construction baseyard for the development of the Shell gas station. According to an interview with the former property owner, aerial photos and county records, this parcel of land was historically only used for ranch land which continued until recently.

#### **5.2.2 Current and Past Use(s) of the Adjoining Properties and Surrounding Area**

MEV has researched current uses of adjoining properties and at its discretion, past uses of the adjoining properties and the surrounding areas. Information presented here represents those items visually or physically observed or identified in the interviews or records review. The information is described herein as items that may indicate *recognized environmental conditions* with adjoining properties and those conditions that may indicate a high probability of migration of hazardous substances or petroleum products to the subject property.

Adjoining Property	Period	Land/Property Use	Concerns	Comments
North of Survey area	Past	Agriculture activity.	Historical pesticide application leading to possible soil and groundwater contamination.	<p>Agricultural activity has been active on this site for several decades. During this time, there may have been the use of agricultural pest control chemicals and fertilizers, which have long been recognized by the U.S. Environmental Protection Agency (EPA) for contributing to the potential contamination of surface soils and groundwater systems. Although chemicals used for agriculture could have been regularly used in significant quantities, they degrade with time in soil. Most agricultural chemical concerns typically arise when bulk (full strength) products leak or are spilled onto soils. However, it is possible that chemicals in long-term use remain at, or above, regulated levels.</p> <p>Due to this site's cross gradient location relative to the subject property (Hashimoto farm) and the limited rainfall in this area, it is unlikely that the Hashimoto farm or Monsanto has significantly impacted the subject property. Groundwater testing should be conducted if that resource is to be utilized for domestic purposes.</p>
	Present	Commercial and agricultural activity.	Pesticide application leading to possible soil and groundwater contamination.	<p>See comments above for the same concern.</p> <p>Currently, the Monsanto Seed Farm actively cultivates the portion of land immediately north of the proposed waterline easement. A small, unnamed gulch transects the seed farm and runs toward and onto the survey area. It is possible that limited chemical contamination from the use of pesticides on the Monsanto farm could have migrated onto the survey area via surface runoff during heavy rainfall events. This is a remote possibility given the amount of rainfall in Kihei, but still should be mentioned. It has been brought to MEV's attention that this drainage way will be routed across the top on Kaonoulu Ranch property and then down the right of way for East Kaonoulu Street to its current transition under Pi'ilani Highway. Monsanto uses chemicals that are legally listed and publically available for farm use.</p>
East of survey area	Past	Undeveloped, grazing land.	None.	None.
	Present	Undeveloped, grazing land.	None.	None.

Adjoining Property	Period	Land/Property Use	Concerns	Comments
South of survey area	Past	Undeveloped, grazing land.	None.	None.
	Present	Undeveloped, grazing land.	None.	None.
West of survey area	Past	Undeveloped land.	None.	None.
	Present	Commercial and residential and Pi'ilani Highway.	None.	None.

The development of past uses of the adjoining properties was primarily interpreted from interviews, MEV site reconnaissance, and aerial photographs. Topographic maps and the Hawaii Atlas provided limited regional information.

### 5.2.3 Topography

The project site lies near the South Maui coastline on the western slope of Haleakala Volcano. The physiographic type feature of the survey area is described as Kula Slightly Dissected Upland.

Topography of the property is varied, but generally slopes from east to west. The survey area is at elevations ranging from 25 feet at the southwestern corner near Pi'ilani Highway to 75 feet in the northwest corner and rises to 137 feet along Ohukai Road and 230 feet at the far eastern boundary. Topographic relief for the property descends more steeply in the vicinity of the on-site gulches and drainages.

The nearest prominent natural features are Kulanihakoi Gulch, which lies just south of the southern boundary and the Pacific Ocean which is located approximately 2,600 feet west of the survey area at its closest point. See Figure 1, Appendix A.

### 5.2.4 Geology and Soils

The Haleakala Volcanics have been divided into three series. The oldest are the Honomanu Volcanic Series, which is the primitive shield composed of Pahoehoe and aa flows of tholeiite, tholeiitic olivine basalt, and oceanite. Above sea level, later lavas have almost entirely buried this volcanic series. The Kula Volcanic Series overlies the Honomanu Volcanics and is composed predominantly of hawaiite with lesser amounts of alkalic olivine basalt and ankaramite. Near the summit of Haleakala Volcano, the Kula Series is at least 750 meters thick and near the shore only 15 to 60 meters thick. After a long period of erosion, renewal activity included the flows and cones of the Hana Volcanic Series, which are composed of the same rock type as of the Kula Series, but alkalic olivine basalts and basaltic hawaiites are predominant over the more siliceous types.

According to the U.S. Department of Agriculture, the following soil series underlies the survey area:

- Waiakoa extremely stony clay loam, 3 to 25% slopes, eroded (WID2).  
The Waiakoa series consists of well-drained soils on uplands on the island of Maui. These soils developed in material weathered from basic igneous rock. The upper part of the profile is influenced by volcanic ash. These soils are gently sloping to moderately steep. The (WID2) soil type is eroded and stones cover 3 to 15% of the surface. In most areas about 50 percent of the surface layer has been removed by erosion. Runoff is medium and the erosion hazard is severe. This soil is used for pasture and wildlife habitat.
- The southwestern portion of the property may contain Alae sandy loam, 3 to 7 percent slopes (AaB). Alae Series soil consists of excessively drained soils on alluvial fans on the island of Maui. These soils

developed in volcanic ash and recent alluvium derived from basic igneous rock. Runoff is slow and the erosion hazard is slight. This soil is usually used for sugarcane and pasture.

Other common, surface geologic phenomena investigated in an environmental site assessment are faults, landslides, rock falls, earthquake zones and volcanic eruptions. In 1992, the USGS reevaluated the seismic hazards for the State of Hawaii, and Maui County was classified as Zone 2B. This indicates that in any given year within a 50-year period (average building life span) there is a 10% chance that 1/5 the force of gravity (ground acceleration) during an earthquake will be exceeded.

After examination of the relevant data, it has been determined by MEV that these geologic phenomena are not a factor to the survey area. However, it should be noted that this is not an investigation for geological hazards.

### 5.2.5 Hydrology

The survey area has an annual average rainfall of approximately 10 inches. The average temperature range from the annual high to the annual low is 85 degrees and 65 degrees Fahrenheit, respectively. The pre-development vegetation zone within this temperature and rainfall range is characterized as Kiawe and lowland shrubs. Characteristic plants consist of Kiawe, koa haole, finger grass, and pili grass.

A small unnamed gulch was identified on-site, running diagonally, in a southwesterly direction through the center of the subject property. The Kulanihakoi Gulch is approximately 40 feet deep and 50 feet wide, and runs close to the southern boundary line of the subject property. At the time of the site visit, both areas were dry and no water flow was observed.

On-site drainage is in a southwesterly direction toward the adjoining concrete storm water diversion ditch located along the western property boundary. (See Figure 2 - Site Plan, Appendix A.)

The pertinent Federal Insurance Rate Maps (FEMA FIRM MAP #15003 0580E dated September 25, 2009 and MAP #150003 0586E dated September 25, 2009), prepared by the United States Federal Emergency Management Agency, depicts the area as determined to be outside the 0.2 percent annual chance floodplain (Zone X).

The Civil Defense Tsunami Evacuation Maps indicate the subject property is **not** within the Tsunami reach-zone. The Pacific Ocean is located approximately 2,600 feet to the west of the site.

### 5.2.6 Hydrogeology

As with all islands of the United States, Maui is regulated by the Coastal Zone Management Act of the Clean Water Act. These two designations require protective comprehensive plans for groundwater management and limit the extent of certain types of development and land use. One important management criterion is the disposal of wastewater. The State Commission on Water Resource Management has designated the groundwater management area as the **Kamaole Aquifer System** within the **Central Aquifer Sector**. The groundwater underlying the survey area is defined as follows:

Table 2-0: Aquifer Classification of the survey area						
Aquifer	Aquifer Type: Hydrology & Geology	Status of Groundwater				
		Development Stage	Utility	Salinity (mg/L Cl)	Uniqueness	Vulnerability to Contamination
Upper	Unconfined, high level aquifer occurring on an impermeable layer (Perched).	Potential Use	Drinking	Fresh <250	Replaceable	High
Lower	Unconfined basal aquifer occurring in horizontally extensive lavas (Flank)	Used	Drinking	Low <250 - 1000	Irreplaceable	Moderate

The following are descriptions of the aquifer classification codes, according to Water Quality Plan: *basal* – freshwater in contact with seawater; *high level* – freshwater not in contact with seawater; *unconfined* – water table is the upper surface of the saturated aquifer; *confined* – aquifer is bounded by impermeable or poorly permeable formations; and *confined or unconfined* – the actual condition is uncertain.

*Aquifer Type Geology*: flank, dike, flank/dike, perched, dike/perched, and sedimentary.

*Development Stage – currently used, potential use, no potential use*: Aquifers are differentiated according to those already being used (currently used), those with potential utility (potential use), and those having no potential developability.

*Utility – drinking, ecologically important, neither*: Identifies aquifers by use.

*Salinity – fresh, low, moderate, high, and seawater*: The gradation of groundwater from fresh to seawater is a feature of all basal aquifers in Hawaii. The upper limit of the standard for drinking water is 250 mg/l Chlorine (Cl<sup>-</sup>) (fresh) and true seawater has a chloride content of 18,980 mg/l.

*Uniqueness – irreplaceable and replaceable*: The classes irreplaceable and replaceable are direct EPA derivatives. Virtually all potable water in the state of Hawaii should be considered irreplaceable over the long term.

*Vulnerability to Contamination – high, moderate, low, none*: Because of the geographical limits of resources, interconnection among groundwater sources and the relatively rapid time of groundwater travel, aquifers can be described as being either vulnerable or not vulnerable to contamination.

The estimated depth to the basal groundwater varies throughout the survey area and is likely to be approximately 35 to 200 feet below the surface (depending on the location on the site) and is projected to flow in a westerly direction. Additionally, perched areas of groundwater may also be underlying the survey area.

The survey area is located makai (seaward) of the Underground Injection Control (UIC). The UIC line is the designated boundary that divides protected inland areas situated over drinking water sources from seaward areas located over non-potable water sources. Sites mauka of the UIC line are considered drinking water sources and permit limitations are imposed by the State Department of Health, Clean Water Branch (CWB).

### **5.2.7 Potable Water Supply and Sewage Disposal System**

The subject property is undeveloped. No potable water or sewage disposal systems have been installed on the survey area.

### **5.3.1 Hazardous/Regulated Substances and Petroleum Products in Connection with Identified Uses.**

No hazardous/regulated substances and/or petroleum products that are in connection with identified current uses as visually and physically observed on the property were noted at the time of the site visit. No bulk hazardous/regulated substances are currently used or stored on-site.

It should be stated that various amounts of miscellaneous debris were noted within debris boulder berms near the northwestern property boundary. It is possible that when groundbreaking activities commence, hazardous/regulated substances and/or petroleum products could be unearthed in this area (or elsewhere within the property). Should this occur, proper testing, removal and disposal procedures are to be followed.

### **5.3.2 Hazardous/Regulated Substances and Petroleum Products/Containers (not in connection with identified current uses).**

There is no evidence of any historic misuse or significant spills of hazardous or regulated substances on the subject property. The Hashimoto family historically cultivated crops north of Lot 2B and 2C. The Monsanto Seed Farm is located immediately north of the proposed waterline easement. The use of limited quantities of pesticides is likely associated with crops in these locations. A small, unnamed gulch transects the Monsanto Seed Farm and continues southwest dissecting the survey area in the north-central area and leads toward Pi'ilani Highway. It is possible that during a heavy rain event, runoff from this cultivated area may cause limited pesticide contaminants to enter the subject property.

Aerial photos indicate that agricultural activities occurred north of the subject property from the early 1960s up until the mid-2000s. Presently, limited diversified agricultural activities continue on the residential property located immediately west of the proposed utility/roadway easement off of Ohukai Road. It is unlikely that the operations of this cross-gradient property have significantly impacted the environmental condition of the subject property. Monsanto began seeding operations during the late 1990s. According to the Land and Resource Manager for Monsanto, the chemicals used on the crop are labeled farm chemicals that are publically available for common use. Monsanto is not licensed for experimental crop use products.

According to Hawaii Administrative Rules, Chapter 128D Environmental Response Law, the presence of agricultural chemicals, resulting from the legal application of a pesticide product, does not constitute a release of a hazardous substance and is not considered a *recognized environmental condition*. However, it is common practice to conduct a limited soil sampling program on former agricultural lands to ensure residual pesticide concentrations (if any) are at acceptable levels. This is recommended (but not legally required) if residential development is to be undertaken.

MEV observed no hazardous/regulated substances and/or petroleum products not in connection with identified current uses as visually and physically observed on the property at the time of the site visit.

### **5.3.3 Unidentified Substance Containers**

MEV noted two (2) metal storage containers located within the baseyard area. These containers were locked during the time of site reconnaissance. According to Mr. Charlie Jencks, these containers hold general construction materials and do not contain hazardous/regulated materials at this time.

MEV did not observe any unidentified substances suspected of being possible hazardous/regulated substances or petroleum products as visually and physically observed on the property at the time of the site reconnaissance.

### **5.3.4 Storage Tanks**

No indications regarding the historic or current presence of USTs on the survey area were obtained through our review of regulatory databases, interviews, or through MEV's site reconnaissance.

As noted in Section 4.1, the Shell gas station is located immediately adjacent to the northwestern corner of the survey area and has USTs currently in use. This facility was constructed in 2007 and according to the EDR and the DOH UST/LUST file provided by the Solid and Hazardous Waste Branch, this facility is not listed as a leaking UST site. Due to the close proximity and the slightly higher elevation of the gas station with respect to the survey area, this facility may pose a negative impact to the environmental condition of the subject property if in the future a leak of the underground storage tanks should occur.

One (1) water tanker trailer exists on the survey area associated with Pi'ilani Baseyard. During the time of MEV's reconnaissance, this tanker was empty. This tanker does not appear to have ever held petroleum product or other substances besides water.

According to Mr. Dan Clegg, Land and Resource Manager for Monsanto, historically, one (1) 250-gallon diesel tank existed near the proposed waterline easement. No spills are known to have been associated with this tank and MEV found no evidence of the tank or any remnant spills on the premises.

### **5.3.5 Odors**

MEV identified no suspect odors on the subject property.

### **5.3.6 Pools of Liquid**

MEV did not observe any pools or sumps containing liquids suspect to be hazardous substances or petroleum products to the extent visually and/or physically observed on the subject property at the time of the site visit.

### **5.3.7 Indications of PCBs**

Pole or pad-mounted transformers numbered 7777 or above are considered non-PCB containing by the Maui Electric Company.

Electrical transmission lines run on the south side of Ohukai Road and distribution lines run toward the Hashimoto residence located just to the west of the central portion of the proposed utility/roadway easement. Three (3) pole-mounted transformers exist immediately east of the Ohukai Road survey area entrance. One (1) pole-mounted transformer is located at the end of the Hashimoto distribution line. None of the transformers in questions are leaking at this time and all are non-PCB-containing according to the listed serial numbers.

#### *Background Information:*

Polychlorinated biphenyls (PCBs) are groups of manufactured organic chemicals that contain 209 individual chlorinated chemicals (known as congeners) and were introduced in 1929. PCBs have been used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment. Products containing PCBs are old fluorescent lighting fixtures, electrical appliances containing PCB capacitors, old microscope oil, and hydraulic fluids.

The manufacture of PCBs stopped in the United States in 1977 because of evidence that they build up in the environment and cause harmful effects. The distribution in commerce of PCB containing items was banned in 1979 (40 CFR 761.20). The EPA aggressively enforces regulations concerning PCB manufacturing, use, distribution, release and disposal under the Toxic Substance Control Act (TSCA). This federal agency extensively regulates the use, servicing, and disposal of PCBs in electrical equipment by enforcing marking, notification, inspection, and record keeping requirements.

#### *5.4.1 Building Structures*

The subject property is essentially undeveloped with no permanent building structures. This section does not apply.

#### *5.4.2 Other Structures*

### **5.5.1 Pits, Ponds, and Lagoons**

There were no areas identified as any man-made or natural depressions that are, or would have been, likely to hold waste liquids or sludge from industrial operations or other activities.

### **5.5.2 Stained Soil or Pavement**

No significant areas of soil staining that indicated gross soil contamination were observed at the time of MEV's site inspection.



If in the future the site should undergo development and a significant release occurs, (>25 gallons), the State of Hawaii is to be notified.

### **5.5.3 Stressed Vegetation**

MEV observed no areas of significant stressed vegetation on the property at the time of the site visit that may have been caused from something other than insufficient water (or flooding).

### **5.5.4 Solid Waste**

There were no indications of significant solid waste dumping or suspect fill materials, mounds, depressions or excavations observed on this property during the site reconnaissance, nor on historic aerial photographs.

The only solid waste items that were identified by MEV on the survey area at the time of the site reconnaissance consisted of the following: (See photos #4, 19, 20 and Figure 2, Appendix B)

- Miscellaneous items (i.e. plastic bags, household refuse and discarded furniture);
- Two automobile tires (2) (special waste) noted near the boulder berm near the northern property boundary;
- One (1) waste dumpster filled with construction materials;
- One landscape debris pile;
- Boulder piles located in the grubbed/graded lot near the northwestern corner. The contents beneath these piles are unknown;
- Perimeter earthen grubbing/grading boulder debris berms along the northern property boundary. Miscellaneous debris items including household refuse were noted within these berms. The contents of these berms are unknown beneath the surficial areas.
- Two (2) derelict vehicles (special waste) were noted immediately west of the central portion of the proposed utility/roadway. No surficial leaks were noted.
- Numerous wax paper bags used by Monsanto to prevent seed cross-fertilization were noted in the unnamed gulch and along the fence line of the proposed waterline easement.

Some wastes may be considered "Special Wastes" according to the Hawaii Administrative Rules (HAR) on Solid Waste, Title 11, Chapter 58.1. Special wastes are those wastes that do not fit in the mixed municipal solid waste (MMSW) category, either by general nature or because of special handling requirements. Special waste categories include: asbestos, sludge, medical waste, used oil, batteries, agricultural wastes, tires, derelict vehicles and white goods (i.e., appliances). Locally, the County of Maui, Department of Public Works, Solid Waste Division administers the disposal of these materials. These wastes need to be disposed of in a permitted solid waste landfill such as the Maui County Central Landfill. Special wastes' management needs to be performed in a manner that complies with all local, state, and federal regulations as applicable to the specific waste type.

### **5.5.5 Wastewater or Storm Water – Discharge Drains, Dry Wells, Drainage Ways, and Retention Basins**

MEV noted a concrete stormwater drainage diversion ditch system near the western property boundary adjacent to Pi'ilani Highway. This drainage network handles the stormwater from the Pi'ilani Highway and the higher elevation surrounding area. (See photo 16, Appendix B)

The Hashimoto agricultural residence located just west of the proposed utility/roadway and north of Lot 2B has one (1) associated retention basin. This basin is located immediately west of the central area of the proposed utility easement. MEV also noted the presence of a residential well used for irrigation purposes next to this retention basin. The retention basin appeared on aerial photographs in the 1960s and was likely only used for diversified crop irrigation on the farm.

MEV did not identify any outdoor wastewater sumps, dry wells, discharge-drains or retention basins on the subject property.

Future developers should be aware of the potential for contaminants to enter nearby drainage ways (Kulanihakoi Gulch) or storm water discharge drains and drainage systems. Products of concern relating to any future development project would be earthen material (silt), oils, antifreezes and other fluids from automobile or on-site machinery, or leaks from on-site stocked items.

Any future grubbing or grading activity that may take place on the survey area (especially if > 1 acre of soil disturbance), both a Maui County Grading Permit and a Department of Health, Clean Water Branch, NPDES (National Pollutant Discharge Elimination System) permit will likely be required. A grading permit is currently open for the subject property for (2) 3-9-001:016, 170 and 171. The permit number is G 20120039 and was issued April 12, 2012 and expires April 18, 2014. The proposed construction activities for the survey area require a NPDES permit. A concrete stormwater drainage diversion ditch exists on the survey area along the western property boundary indicating that stormwater runoff will enter navigable waters. The unnamed gulch on the survey area also leads toward the concrete ditch. The immediately adjacent Kulanihakoi Gulch also carries runoff toward the Pi'ilani Highway culvert system. Pi'ilani Promenade was awarded a NGPC (Notice of General Permit Coverage) from the DOH. This permit expired as of October 21, 2012. However, Pi'ilani Promenade has filed for an extension and this was granted by the DOH.

#### **5.5.6 Wells**

One (1) registered well is listed for the subject property. The well is owned by Kaonoulu Ranch and is listed as "Kaonoulu Irrigation 1". This well is used for irrigational purposes only and will be used for irrigation for the proposed construction project.

According to the EDR, twenty-two (22) wells exist within the searchable distance of 1-mile from the survey area. Eighteen of these well are used for irrigation, one is used for agricultural purposes, one is unused at this time and two are listed as "other". (See the EDR in Appendix B for more details.)

From MEV's observations and database search, there are no other production, domestic, abandoned, irrigation or monitor wells located on the survey area. See Figure 1, Appendix A and EDR with GeoCheck, Appendix B.

#### **5.5.7 Septic and Cesspool Systems**

The subject property is essentially undeveloped. This section does not apply. MEV did not obtain evidence of any former septic or cesspool system located on the survey area.

The concerns listed below are not normally considered relevant under CERCLA, however, they may be considered regulated under other environmental laws and ordinances and may present a potential liability to the property owner.

#### **5.6.1 Asbestos-Containing Materials (ACM)**

The subject property did not have any permanent on-site building structures that would consist of asbestos-containing materials. MEV was not made aware of any subsurface water lines that could be asbestos-containing.

##### *Background Information:*

Asbestos was widely used in building materials and in fire retardant applications up through the 1980s. Asbestos use in the United States did not start to decline until the EPA banned the spray-applied materials

during 1973-1978. Further restrictions on U.S. manufactured asbestos products continued into the 1990s. The EPA ban rule and phase-out of all asbestos-containing materials (ACMs) was to be implemented in stages from 1990 to 1997, but the Rule was overturned in federal court.

Asbestos is a known health hazard causing progressive lung scarring and cancer. Asbestos related conditions usually develop within 15 to 40 years after exposure. Exposed smokers have an increased risk factor of 50 to 90 times that of the non-smoking population.

State and federal rules have established standards for the use and control of ACM. These standards apply to worker protection, notification procedures, renovation/demolition activities, and construction debris (waste) management.

Under the EPA's Asbestos Hazard Emergency Response Act (AHERA), 40CFR763, asbestos-containing material (ACM) is defined as any substance whose asbestos content exceeds one percent (1%) of the total volume as determined by Polarized Light Microscopy (PLM) analysis. Building inspector training, sampling procedures and laboratory analysis are also addressed under this rule. Some aspects of this rule have been extended to public and commercial buildings. The Hawaii Administrative Rules 11-502 have essentially adopted EPA's AHERA standard.

Current OSHA regulations for occupational exposure to asbestos hazards require commercial building owners to *presume* all thermal system insulation, sprayed or textured surfacing materials and asphaltic and vinyl flooring installed in buildings constructed before 1981 to contain ACM. The Federal Occupational Safety and Health Act (OSHA) Construction Standard for Asbestos requires that building owners communicate any potential or actual asbestos hazards (29CFR1926.1101(k)). Owner/Operators must inform in-house employees and any outside contractor (workers) who apply or bid for work in or adjacent to areas known or *presumed* to contain asbestos. Included asbestos materials are Thermal system insulation (TSI), sprayed or troweled-on surfacing materials, and asphalt or vinyl flooring material installed prior to 1981. Hawaii Occupational Safety and Health (HIOSH) under HAR 12-141.1 has adopted the federal standard.

Under EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) 40CFR Part 61, are requirements for renovation and demolition work involving ACM.

### **5.6.2 Lead-Based Paint**

The subject property did not have any permanent on-site building structures that would consist of possible lead-based paint materials. MEV did not find any suspect lead-based paint debris within the survey area.

#### *Background Information:*

Lead is a metal element in pure form but is found in other chemical compounds used within manufactured and formulated products. Among these are pipe solder, paint and other coatings and water pipes - items commonly found in older buildings and homes.

Lead becomes toxic to the human body even in low levels by chronic over exposure. The exposure may occur by breathing dust, eating dust (on food, tobacco, fingers, or eating paint chips (children)). Lead poisoning affects the brain and central nervous system; especially susceptible are young children. Lead is also known to impact kidney and liver functions.

The EPA/HUD defines lead-based paint as paint or other coatings containing lead equal to or in excess of 0.5% lead by weight or 1.0 mg/cm<sup>2</sup>. The prevalence of lead-based paint in housing built before 1940 is especially high according to research conducted by the U.S. Department of Housing and Urban Development (HUD). After 1940, its use diminished until 1972 when U.S. manufactured housing paint became regulated at 0.5 percent lead by weight and "banned" in 1978; this means that paint could not be

manufactured and sold for housing use if it contained lead above the U.S. Consumer Products Safety Commission's (CC) 0.06 percent by weight. The "ban" provided a basis for using the cut-off date of 1978 when disclosing the possibility of lead-containing paint in sales and rentals of housing units.

Any detected lead-level in paint below HUD and the CPSC's criteria remains an environmental concern under the U.S. Occupational Safety and Health Administration's (OSHA) Lead Standard for Construction Workers, 29CFR1926.62 and the HIOSH equivalent, HAR 12-148.1. Communication of lead-levels in paint is required for worker safety, when conducting renovation or demolition, and for construction debris (waste) management.

### **5.6.3 Arsenic-Containing Substances**

MEV did not observe any on-site structures or any suspect arsenic-containing building materials or waste materials at the time of the site visit.

#### *Background Information:*

Arsenic, like several other heavy metals, tends to accumulate in the body. Ingestion of a small dose may seemingly exert no adverse effect at all, while ingestion of multiple small doses could cause death. In lesser amounts, arsenic-containing compounds cause other health problems, like mottling of the skin, skin lesions, nervous disorder, and severe, irreversible liver damage. Arsenic is a human carcinogen, causing skin tumors when ingested and lung tumors when inhaled.

Arsenic-containing compounds were once used as components of some inorganic pesticides. In the 1940s, these pesticides were used to control insects and rodents.

To protect against exposure to high arsenic concentrations, OSHA requires workers to use air-purifying respirators and to wear protective clothing in areas where airborne arsenic compounds are known to exist.

The Resource Conservation and Recovery Act (RCRA), Subtitle C lists arsenic and arsenic-containing compounds as a hazardous waste. Therefore, construction/demolition debris (waste) management should be conducted in accordance with all Federal, State, and Local regulations. This typically requires waste segregation into construction material and dust/debris waste. Sampling using the Toxicity Leach Characteristic Procedure (TCLP) for arsenic is required for hazardous waste determination.

### **5.6.4 Radon**

MEV did not identify any man-made products on the subject property that are known or suspected to emit radioactive decay elements.

#### *Background Information:*

Radon is a colorless and odorless radioactive gas that can produce health effects such as cellular injury. Radon gas can occur in the natural environment as concentrations from certain rocks and geologic conditions have a high radon-emanation potential.

These surface rock types are not known to occur in Hawaii. It is possible that increased concentrations of Radon could occur in regions where geologic fault and volcanic rift zones may release gases from deeper earth sources. However, the State of Hawaii, Department of Health (DOH) has not addressed concerns for any significant levels of gas to occur anywhere in Hawaii. This was based on the 1992 and 1996 DOH investigations conducted in elementary schools throughout the State.

### **5.6.5 Lead in Drinking Water**

The subject property is undeveloped. This section does not apply.

#### **5.6.6 Ecological Resources, Endangered Species, Cultural and Historic Resources, and Wetlands**

There are no known wetlands, critical habitats, or threatened and/or endangered species on the project site. The survey area is not located within the County of Maui's Special Management Area (SMA).


Rock piles were noted on the subject property, however, their significance, if any, is unknown to MEV. According to a Phase I ESA of the survey area conducted by VEC, in 1994 Xamanek Researchers and Munekiyo, Arakawa & Hiraga, Inc. conducted an archaeological inventory surveys, for the subject property. This report documented a total of twenty-one (21) archaeological sites, twenty (20) of which were assigned State Inventory of Historic Places numbers. Of these sites, nineteen (19) were deemed significant for information content and have had sufficient data collected rendering them complete with no further archaeological work necessary. One (1) petroglyph was found on the premises, removed and slated for permanent preservation in a separate location. Based on Munekio's findings, the subject property underwent a historic preservation review by the State Historic Preservation Division in 2007. This more recent investigation concluded that no historic properties will be affected by the proposed intended property use.

#### **5.6.7 Indoor Air Quality**

The subject property is undeveloped. This section does not apply.

#### **5.6.8 High Voltage Transmission Lines**

MEV did not identify any high voltage overhead transmission lines on the subject property. Electrical transmission lines run on the south side of Ohukai Road leading toward Pi'ilani Highway.



MEV conducts interviews with persons that may have specific knowledge on the subject property and any land use activities that may have operated on-site in the past or continue to currently operate on the subject property. Interviews are also an effective tool to better understand the overall historical regional and local setting of the survey area. Whenever possible, MEV attempts to interview the present and past owner(s), site manager, occupants, local government officials and other relevant contacts. See also Section 8.3.

In MEV's 2010 Phase I Environmental site investigation of the subject property, information provided by the client representative in the Preliminary Environmental Investigation, Douglas Gray of Pi'ilani Promenade LLC c/o Eclipse Development Group was not aware of any environmental liens, proceedings, or investigations against the subject property as of the date of the 2010 ESA.

The property owner representative, Mr. Charlie Jencks, completed an updated environmental investigation form for this ESA. The completed questionnaire is attached in Appendix B.

In 2010, MEV conducted a previous Phase I ESA on a portion of the current survey area. For the previous ESA, MEV spoke with Mr. Charlie Jencks of Maui Industrial Partners, LLC, (former owner) representative for the survey area. Mr. Jencks informed MEV that the survey area was purchased from Kaonoulu Ranch in 2005. To his knowledge, the historic baseyard located at the northwestern corner of the property did not have any significant spills and did not store bulk amounts of hazardous substances/materials.

Mr. Jencks provided valuable information for this current Phase I ESA. Mr. Jencks provided MEV with permit information, the on-site well information, a subdivision map and property boundary information. Mr. Jencks told MEV that a portion of the property is slated for the development of 200 residential units, a waterline easement and water tank, and a utility easement. Mr. Jencks also informed MEV that the on-site baseyard contains construction materials for Pi'ilani Promenade and that currently there is no bulk storage of petroleum products and/or hazardous materials on the premises. The on-site well was drilled with State permits and is intended for irrigation use in the project. As for the unnamed drainage way, the small one traversing the property will be routed across the top on Kaonoulu Ranch property and then down the right of way for East Kaonoulu Street to its current transition under Pi'ilani Highway. Mr. Jencks informed MEV in the updated Environmental Investigation that the he is not aware of any recognized environmental conditions on the survey area.

MEV spoke with Mr. Doug Peterson of Kaonoulu Ranch, the previous property owner representative. Mr. Peterson informed MEV that Kaonoulu Ranch purchased the survey area in 1916 from the Cornwell family. Mr. Peterson said that during Kaonoulu Ranch ownership, the subject property was only used for cattle grazing and ranch land. No above ground storage tanks, underground storage tanks or pesticides were used on the premises. Mr. Peterson also informed MEV that prior to their ownership the land was also used for cattle grazing and ranch land since the 1800s.

MEV spoke with Mr. Dan Clegg, the Land and Resource Manager with Monsanto. Mr. Clegg informed MEV that Monsanto began using the former Hashimoto agricultural plot located to the east of the proposed utility easement during the late 1990s. Mr. Clegg said that historically, one 250-gallon diesel tank was stored on the Monsanto seed farm site, but is no longer present. No spills have been associated with this

former tank. Mr. Clegg also mentioned that there were crop chemicals stored in a shipping container located on the northern side of the seed farm site. He is unsure if they are still present. All chemicals used are commercially available products specifically labeled for crops and commercially identified for farming. Monsanto is not licensed for experimental use product. Mr. Clegg is not aware of any spills or recognized environmental conditions associated with the seed farm site.

[REDACTED]

A list of any additional persons interviewed during the course of this investigation is located in Section 8.3. None of these persons interviewed had any specialized knowledge of the site relating to *Recognized Environmental Conditions* on the survey area.

[REDACTED]

**Recognized environmental conditions**, as defined by ASTM Standard E1527-05, are the presence or likely presence of any hazardous substance 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, ground water, or surface water of the property.

**Recognized environmental conditions** are described with regard to (1) the nature and extent of the environmental condition, (2) potential or actual environmental threat, (3) potential for transport (migration) of any environmental conditions, and (4) consideration for further investigation. 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.

MEV has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Practice E 1527-05 for the subject property, mostly located mauka (toward the mountain) of Pi'ilani Highway (State Highway 31), between the Kihei Commercial Center and Kulanihakoi Gulch and due east of Kaonoulu Street's eastern terminus. Proposed utility easements included in the survey area are located along a gravel lane south of Ohukai Road and extend farther east immediately south of the Monsanto Seed Farm site. The survey area is located in the northern portion of Kihei, Maui, Hawaii.

The site consists of eight (8) parcels of land in their entirety and portions of three (3) land parcels, with a total measurement of approximately 101 acres in total area. The site is further described on the Tax Maps of the State of Hawaii as follows:

Division 2, Zone 3, Section 9, Plat 1, Parcel 16 (Lot 2A), 169 (Lot 2B), 170 (Lot 2C), 171 (Lot 2D), 172 (Lot 2E), & 34 (portion). The site also includes Division 2, Zone 2, Section 2, Plat 2, Parcels 16 & 82 (portions) and parcel 77, Division 2, Zone 3, Section 9, Plat 1, Parcel 48, and Division 2, Zone 3, Section 9, Plat 48, Parcel 122.

Any exceptions to or deletions from this practice are described in Section 1.4, Limitations and Exceptions, of this report.

**This assessment has revealed no evidence of *recognized environmental conditions* in connection with the property.**

#### **7.1.1 Database Listings (See Section 4.0 & EDR Report, Appendix B)**

##### *Findings/Concerns:*

Our records review did not discover any current investigation of the survey area under any programs conducted by a federal, state, or local environmental agency.

Two (2) potential risk sites, listed as State Hazardous Waste Sites (SHWS) were identified within a 1-mile radius of the survey area.

Selland Construction, Inc. located at 454 Ohukai Road had a confirmed release in 1994 of diesel fuel and oil due to overfill, equipment maintenance and construction. This area, once called "Ohukai Baseyard" was likely the construction baseyard for the residential subdivision now located immediately northwest of the subject property. According to the EDR and the HEER Office, the case number is 19940218 and was given a "low priority" site status. The initial assessment revealed "hazardous conditions" and as of 1994, the area was continually monitored by Haleakala Ranch.



Kihei Chevron located at 1281 S. Kihei Road is listed as a SHWS due to a station spill.

Two (2) UST sites are located within the searchable distance of 0.25-mile from the survey area. *NCT LLC (Shell Station)* and *Kihei Minit Stop* both have in-use USTs.

Opinions/Conclusions:

According to the HEER Office's response to MEV's inquiry regarding the Selland Construction incident, the case has been listed as "Site On-Scene Coordinator No Further Action" SOSC NFA. Based on the gathered information, MEV concludes that this incident did not have any adverse effect on the subject property. The area where this occurred is now a residential subdivision, further indicating that this site has indeed been cleaned up and properly managed.

The above-noted Kihei Chevron site is listed as of 2004 as having received a "No Further Action". MEV does not believe this site would have environmentally adversely affected the subject property due to the distance from the survey area and the down-gradient proximity.

Due to the distance from the survey area and the current listing with the DOH (non-LUST sites), the listed UST sites are not anticipated to negatively impact the subject property at this current time.

It should be noted that the Shell station was constructed in 2007 and is located immediately adjacent to the northwestern corner of the survey area. Currently, this facility is not listed as a LUST site. Due to the close proximity and the slightly higher elevation of the gas station with respect to the survey area, this facility may pose a negative impact to the environmental condition of the subject property if in the future a leak of the underground storage tanks should occur.

**7.1.2 Current and Historic Use or Storage of Hazardous and Regulated Substances (See Sections 5.3.1 & 5.3.2)**

Findings/Concerns:

There is no evidence of any historic misuse or significant spills of hazardous or regulated substances on the subject property. The Hashimoto family historically cultivated crops north of Lot 2B and 2C. The Monsanto Seed Farm is located immediately north of the proposed waterline easement. The use of limited quantities of pesticides is likely associated with crops in these locations. A small, unnamed gulch transects the Monsanto Seed Farm and continues southwest dissecting the survey area in the north-central area and leads toward Pi'ilani Highway. It is possible that during a heavy rain event, runoff from this cultivated area may cause limited pesticide contaminants to enter the subject property.

Aerial photos indicate that agricultural activities occurred north of the subject property from the early 1960s up until the mid-2000s. Presently, limited diversified agricultural activities continue on the residential property located immediately west of the proposed utility/roadway easement off of Ohukai Road. It is unlikely that the operations of this cross-gradient property have significantly impacted the environmental condition of the subject property. Monsanto began seeding operations during the late 1990s. According to the Land and Resource Manager for Monsanto, the chemicals used on the crop are labeled farm chemicals that are publically available for common use. Monsanto is not licensed for experimental crop use products.

MEV observed no hazardous/regulated substances and/or petroleum products not in connection with identified current uses as visually and physically observed on the property at the time of the site visit.

Opinions and Conclusions:

According to Hawaii Administrative Rules, Chapter 128D Environmental Response Law, the presence of agricultural chemicals, resulting from the legal application of a pesticide product, does not constitute a release of a hazardous substance and is not considered a *recognized environmental condition*.

While the use of pesticides and herbicides on the adjoining property will not necessarily result in adverse impacts to the environmental condition of the survey area, it is possible (yet unlikely) for residual amounts of these substances to accumulate to concentrations that present a potential threat to human health or the environment. However, due to the small scale size of agricultural activity on the northern adjoining lot, and its cross gradient location relative to the subject property, it is unlikely that pesticide levels on the subject property (soil or groundwater) are above regulated levels. Groundwater sampling and laboratory testing would provide additional information to evaluate potential environmental effects from these agricultural activities. A standard proactive procedure, which is recommended by the State Department of Health, would be to conduct such a survey prior to future development of this site, especially any residential development. There is, however, no regulatory requirement to conduct this sampling. Groundwater sampling and laboratory analyses should be conducted if the groundwater resource is to be used for a potable water source in the future.

The concerns listed below may not be considered *recognized environmental conditions* by ASTM definition. However, they may be considered regulated under other environmental laws and ordinances and may present a potential liability to the property owner.

**7.2.1 Solid Waste Management (See Section 5.5.4)**

Findings/Concerns:

MEV observed limited solid waste dumping on the survey area. The majority of the solid waste material found consisted of limited amounts of household refuse, discarded furniture, plastic bags, wax paper seed bags, landscape debris piles, construction materials and several boulder piles/boulder berms. Regulated items found on the survey area included two (2) automobile tires and two (2) derelict vehicles.

Opinions and Conclusions:

Any waste disposal should be in a permitted solid waste landfill or recycled/managed in a manner that complies with all local, state, and federal regulations as applicable to the specific waste type with special attention given to regulated items.

Some wastes may be considered "Special Wastes" according to the Hawaii Administrative Rules (HAR) on Solid Waste, Title 11, Chapter 58.1. Special wastes are those wastes that do not fit in the mixed municipal solid waste (MMSW) category, either by general nature or because of special handling requirements. Special waste categories include: asbestos, sludge, medical waste, used oil, batteries, agricultural wastes, tires, derelict vehicles and white goods (i.e., appliances). Locally, the County of Maui, Department of Public Works, Solid Waste Division administers the disposal of these materials. These wastes need to be disposed of in a permitted solid waste landfill such as the Maui County Central Landfill. Special wastes' management needs to be performed in a manner that complies with all local, state, and federal regulations as applicable to the specific waste type.

Regarding the boulder debris piles/berms, it is important to note that if additional clearing of the property commences and large amounts of construction debris or unidentifiable substances (containers/drums) are discovered, proper waste identification, testing and applicable waste handling/disposal procedures are followed.

## 7.2.2 Surface Waters and Area Aquifer Protection (See Section 5.5.6)

### Findings/Concerns:

The property owner should be aware of the potential for contaminants to migrate off-site and into nearby storm water drains. Products of concern would be silt, oils, antifreezes and other fluids from automobile or on-site machinery.

### Opinions and Conclusions:

In order to minimize the regulatory profiling of the survey area as a potential responsible party for any newly discovered groundwater or surface water contamination, property managers should consider implementing conservative, proactive environmental policies for the current and future tenants.

**The conclusions stated above should not be construed to mean that any regulatory agency would have the same opinion as this author, nor is any implication proposed therefrom.**

**The results of this environmental assessment are intended for general reference purposes only and are not intended as legal advice. The advice of legal counsel should be sought in regard to individual facts, circumstances and interpretation of environmental liability.**

- CONFIDENTIAL
- References
1. American Standard of Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, E1527-05, 2005.
  2. "Atlas of Hawaii", 2<sup>nd</sup> Edition, Department of Geography, University of Hawaii at Hilo, 1983, University of Hawaii Press.
  3. "Atlas of Hawaii", 3<sup>rd</sup> Edition, Department of Geography, University of Hawaii at Hilo, 1998, University of Hawaii Press.
  4. County of Maui, Real Property Tax Division, Historical Records for TMK Number (2) 3-9-001:34 (portion), (2) 3-9-001: 016, 169, 170, 171, 172, (2) 2-2-002: 016, 82 (portions), and (2) 2-2-002: 77.
  5. Hawaii Administrative Rules, Title 11, Department of Health, Chapter 58.1, Solid Waste Management Control.
  6. State of Hawaii, Department of Health, Solid and Hazardous Waste Branch, Underground Storage Tank Section, List of Leaking Underground Storage Tank Release Sites, April 2013.
  7. State of Hawaii, Department of Health, Solid and Hazardous Waste Branch, Underground Storage Tank Section, List of Underground Storage Tank Facilities, April 2013.
  8. State of Hawaii, Department of Health, Voluntary Response Program (VRP), List of Voluntary Response Program Sites, April, 2013.
  9. State of Hawaii, Department of Health, Office of Hazard Evaluation and Emergency Response, List of Release Notifications, April, 2013.
  10. State of Hawaii, Department of Health, Office of Hazard Evaluation and Emergency Response, List of Sites List, April 2013.
  11. State of Hawaii, Department of Land and Natural Resources, Registered Wells and Dry Wells.
  12. State of Hawaii, Department of Land and Natural Resources, "State of Hawaii Water Quality Plan and Groundwater Map", June 1990, Revised December 1991.
  13. U.S. Department of Agriculture, Soil Conservation Service, "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii", 1972.

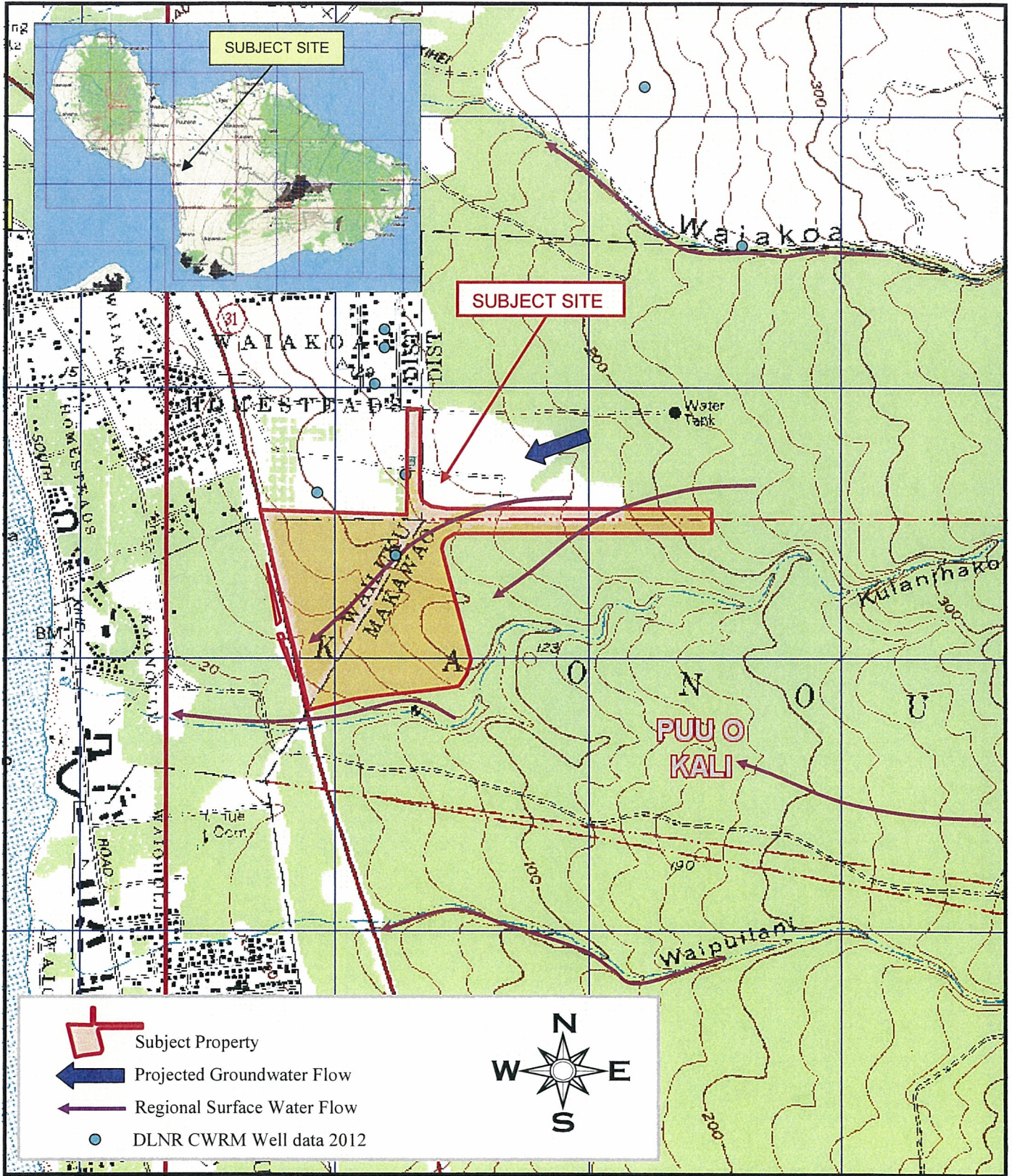
1. Environmental Data Resources, Inc., "The EDR Radius Map™ Report with Geocheck®", July 29, 2013.
2. Federal Emergency Management Agency, "Flood Insurance Rate Map", Numbers #15003 0580E dated September 25, 2009 and MAP #150003 0586E dated September 25, 2009.
3. Sanborn Maps (no coverage).
4. U.S. Geological Survey, 7.5 Minute Topographic Map, Pu'u O Kali Hawaii 1983 & 1992.
5. <http://www.mauipropertytax.com/Main/Home.aspx>

7/29/13	Mr. Charlie Jencks	Current property owner representative – Pi'ilani Promenade LLC	2111 Pi'ilani Highway Kihei, HI 96753	(808) 250-3178
8/2/13	DOH personnel	Clean Water Branch	919 Ala Moana Blvd., Rm 206 Honolulu, HI 96814	(808) 586-4309
8/6/13	Mr. Dan Clegg	Monsanto Land and Resource Manager	2111 Pi'ilani Highway Kihei, HI 96753	(808) 283-4028
8/4/10	Mr. Douglas Gray	Client – Pi'ilani Promenade, LLC c/o Eclipse Development Group	17802 Sky Park Circle Suite 200 Irvine, CA 92614	(949) 251-1161
8/12/10	Mr. Charlie Jencks	Current property owner representative – Maui Industrial Partners, LLC	2111 Pi'ilani Highway Kihei, HI 96753	(808) 250-3178
8/12/10	Ms. Lauren Tokura	Clean Water Branch	919 Ala Moana Blvd., Rm 206 Honolulu, HI 96814	(808) 586-4309
3/25/10	HI DOH HEER Office	HEER personnel	919 Ala Moana Blvd., Rm 206 Honolulu, HI 96814	(808) 586-4249

# **Appendix A:**

## **Maps, Plans, and Photographs**

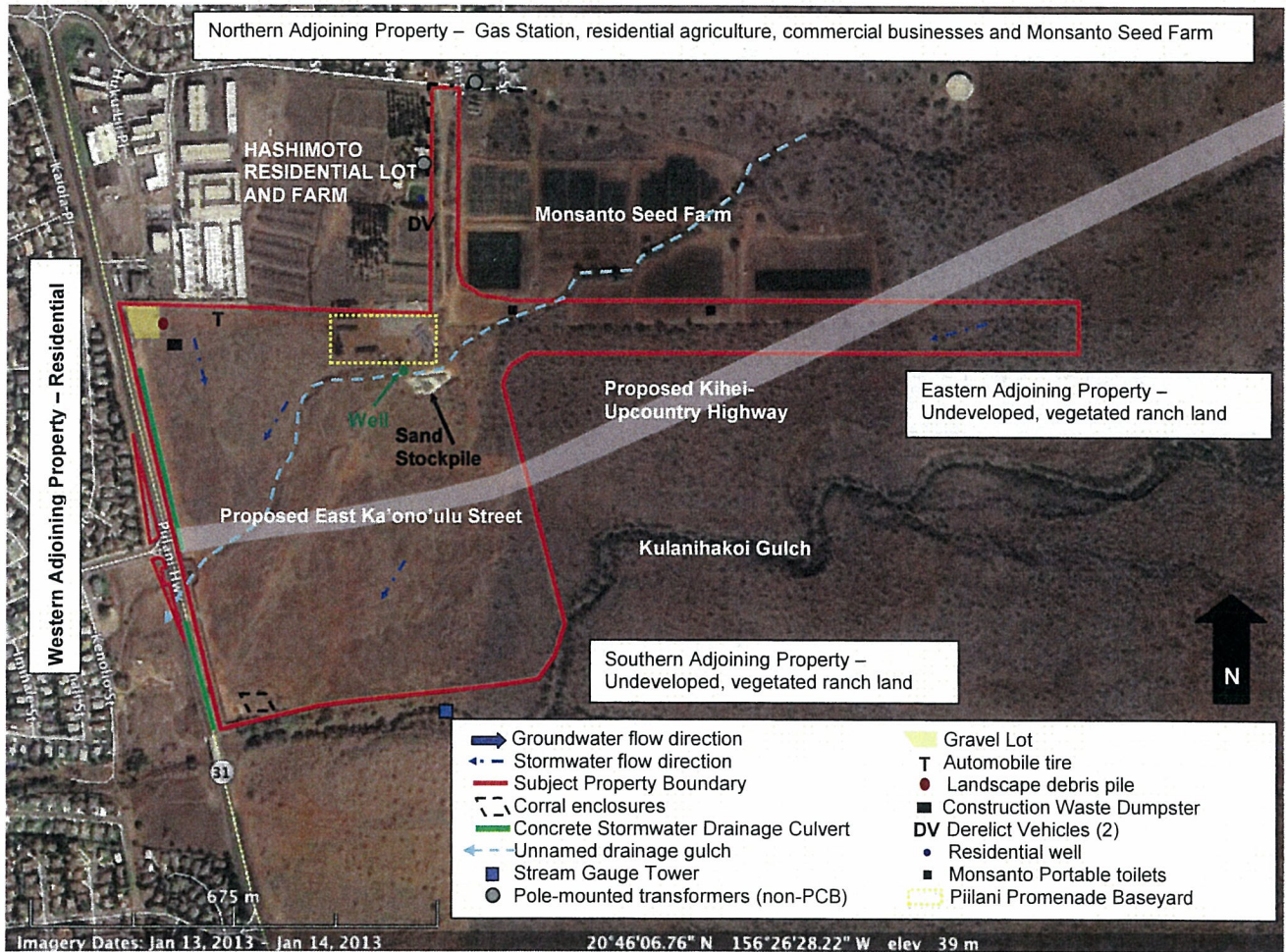
# FIGURE 1: REGIONAL SETTING MAP



© 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

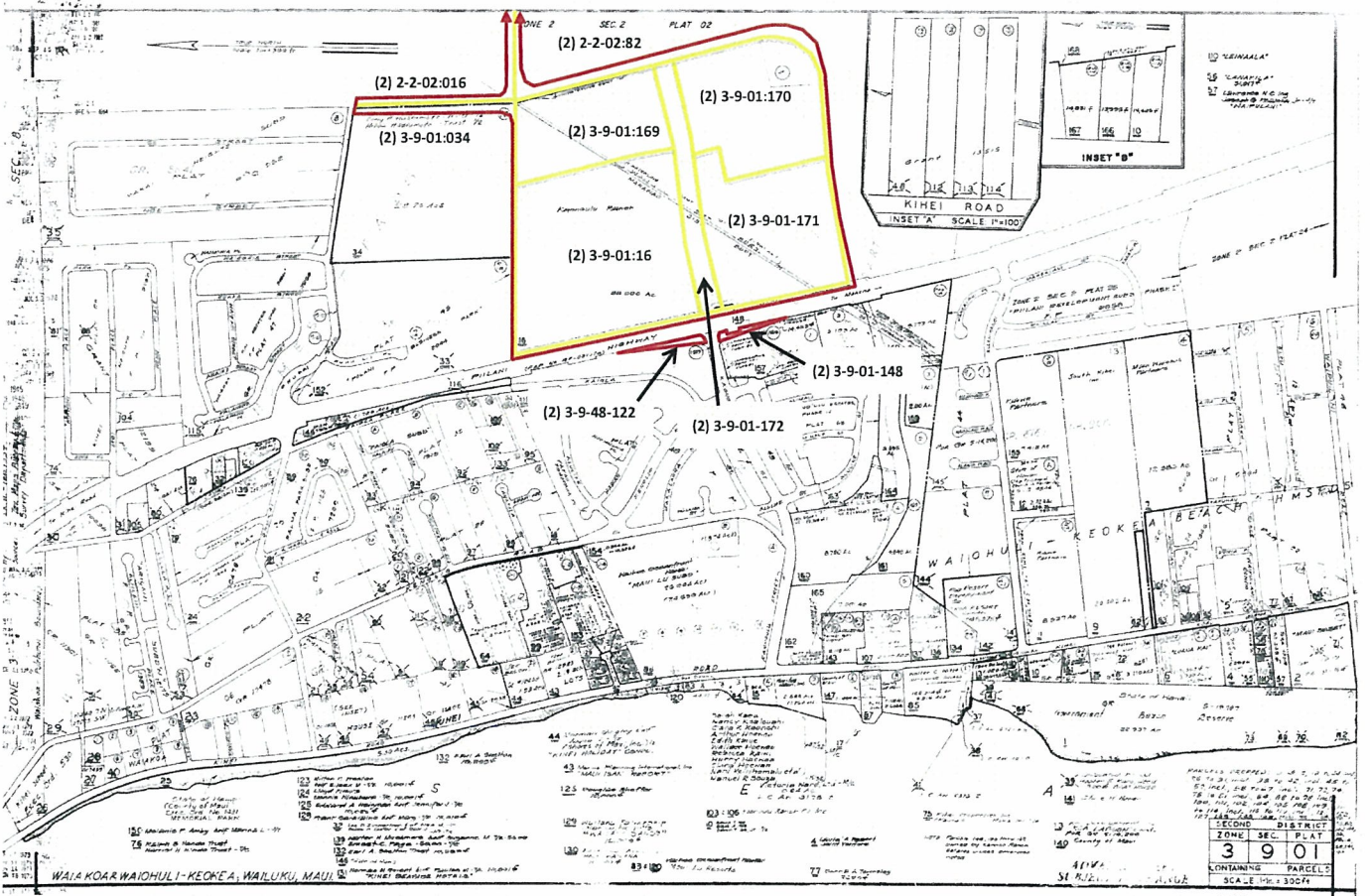
750 ft Scale: 1 : 25,000 Detail: 13-0 Datum: WGS84

## FIGURE 2: SITE MAP

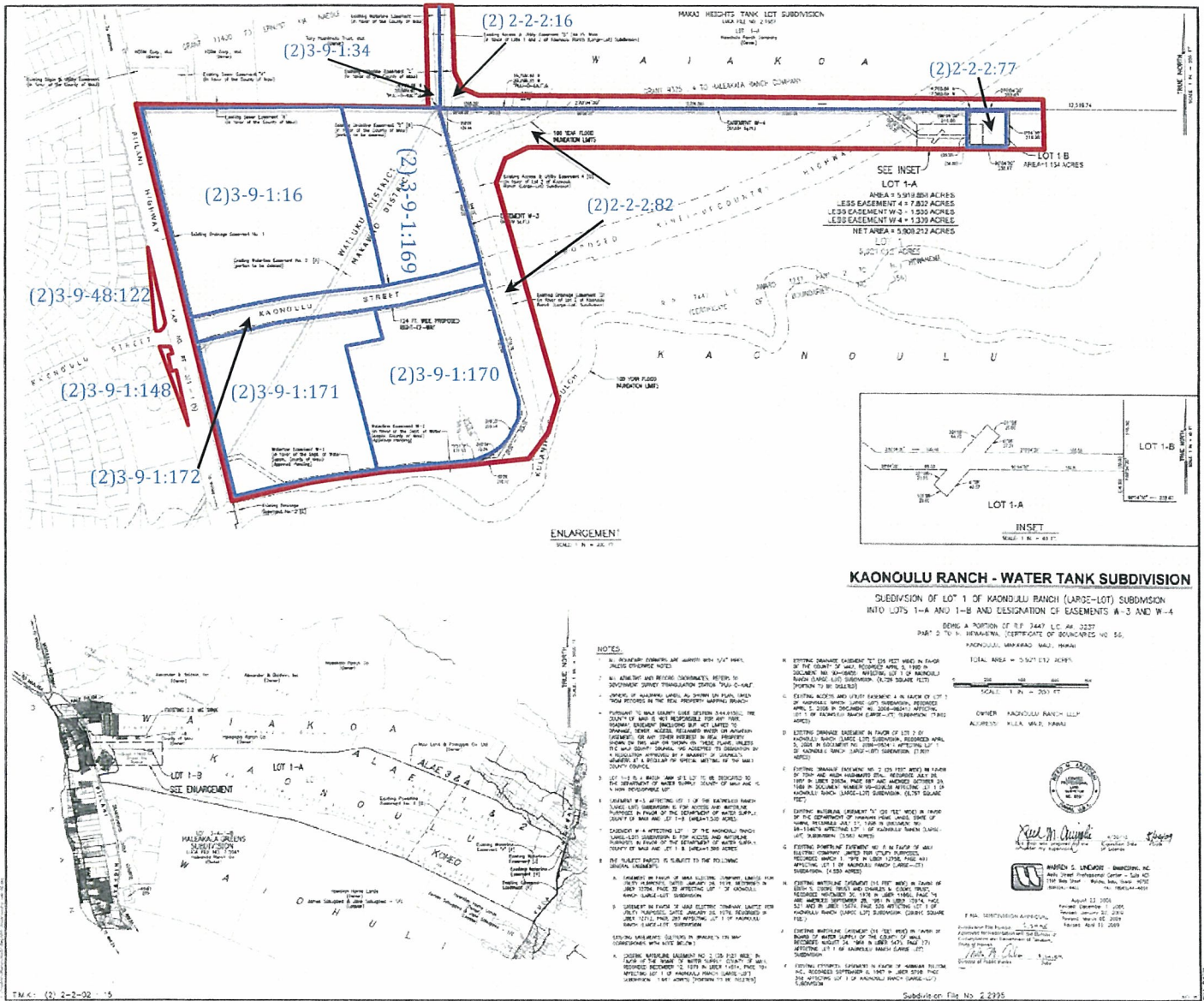


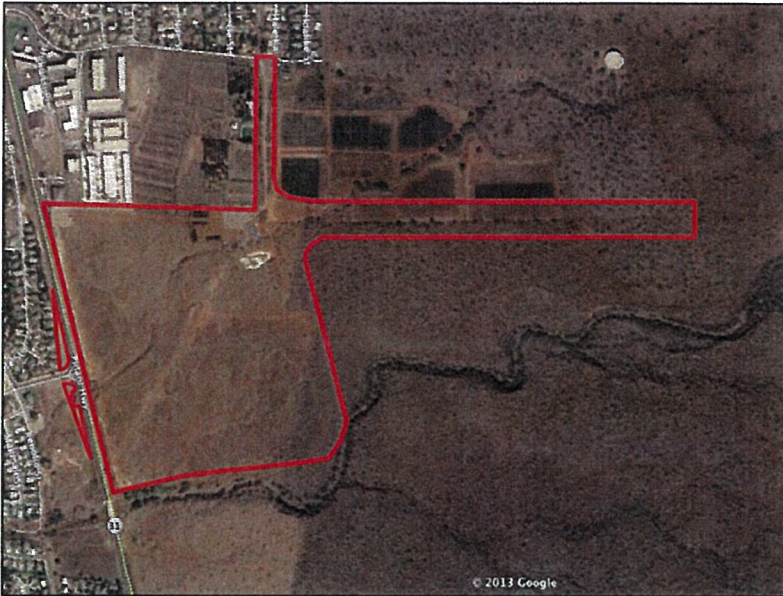


### FIGURE 3: TAX MAP KEY



# FIGURE 4: SUBDIVISION PLAT MAP

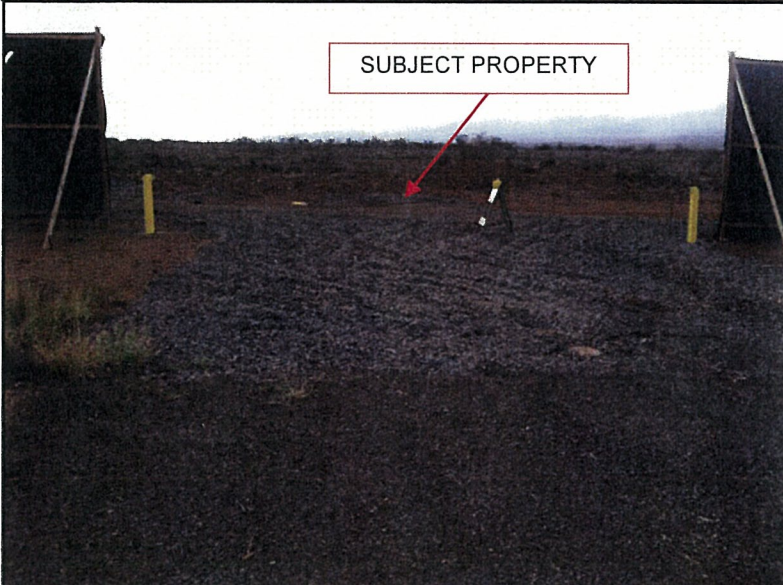




### PHOTO 1

Aerial view of the subject property and the immediate adjoining areas.

Photo source:  
Google Earth Photo date 2013.



### PHOTO 2

Easterly view of the west site access entrance off of Piilani Highway located along the western property boundary.



### PHOTO 3

Southerly view along the western boundary. This photo was taken from the gravel lot in the northwest corner of the main portion of the Subject Site. Goodfellow Bros., Inc. has installed a 12-foot dust fence along the western property boundary in preparation for development.

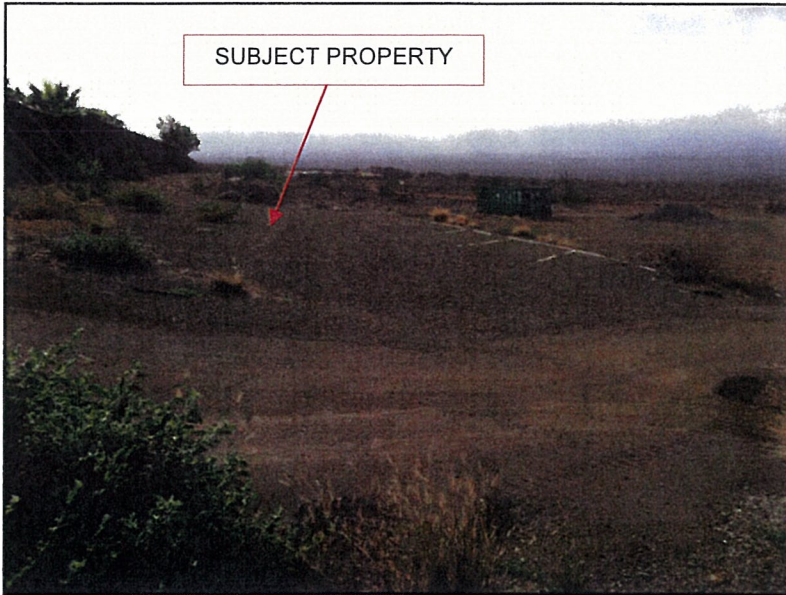


PHOTO 4

Easterly view along the northern property boundary. This photo was taken from the gravel lot in the northwest corner of the subject site. The waste dumpster in the photo is filled with construction debris such as wood and cardboard and does not appear to contain any hazardous materials.

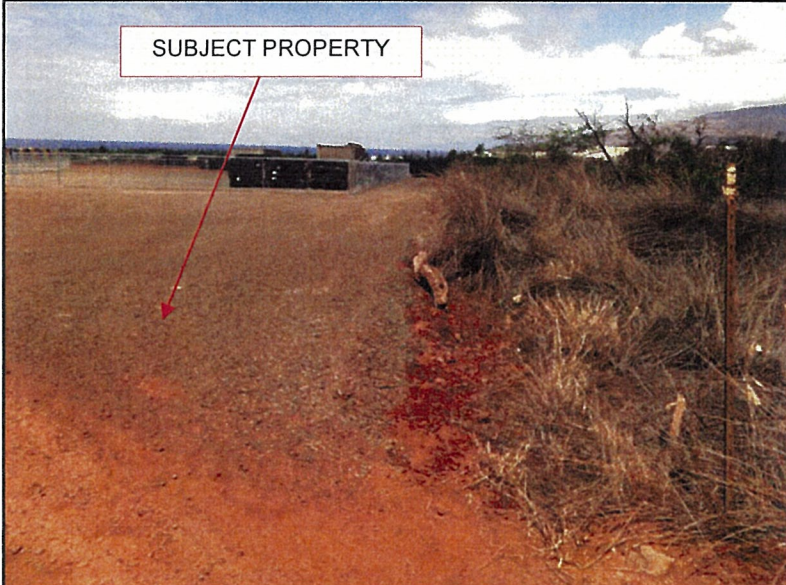


PHOTO 5

Westerly view along the northern property boundary. This photo was taken from the northeast corner of Parcel 169. The construction materials in the back of the photo are part of the Piilani Promenade Baseyard. Baseyard materials consist of concrete drain blocks, iron and plastic irrigation piping, two meta storage containers, and one empty water tanker.

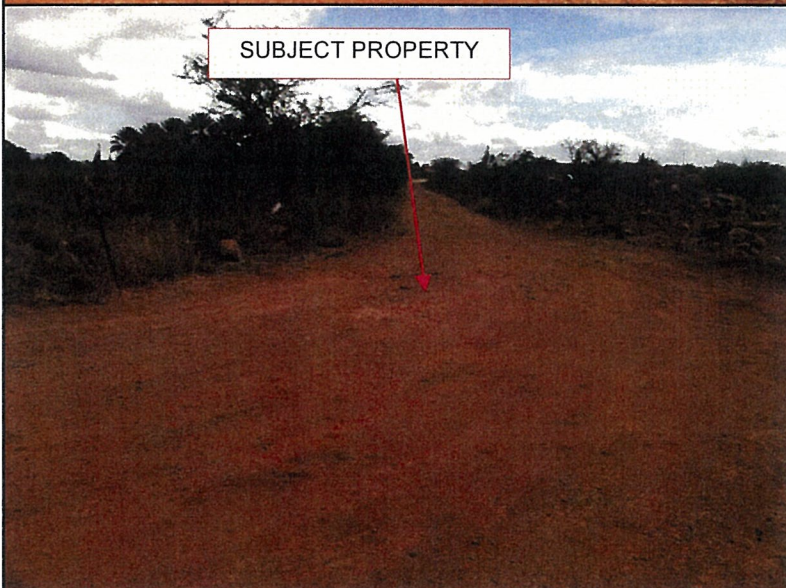


PHOTO 6

Northerly view along the proposed roadway and utility easement that leads toward Ohukai Road. The Monsanto Seed Farm is located east of the gravel road. The Hashimoto residential/agricultural land is located to the west.

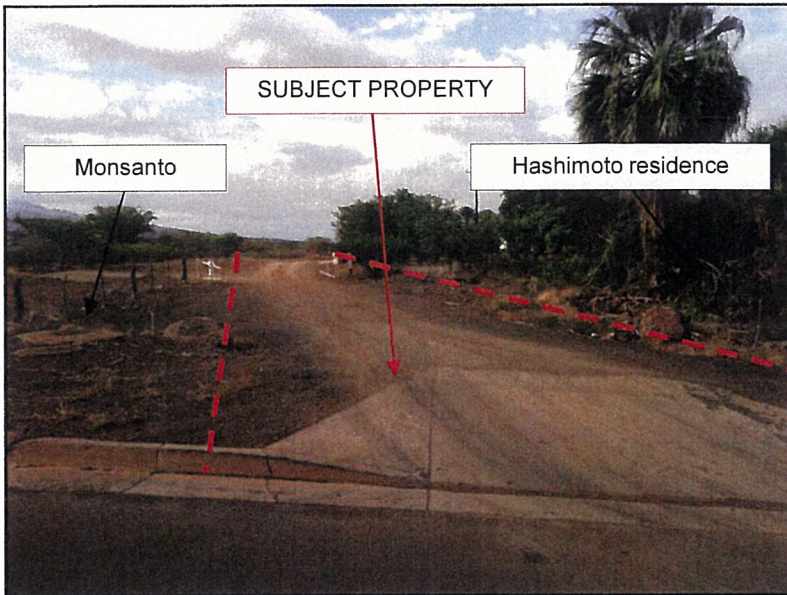


PHOTO 7

Southerly view along the proposed roadway and utility easement off of Ohukai Road. The subject site includes the gravel road and immediately surrounding areas. The dashed line represents the approximate property boundary in this area.



PHOTO 8

Northeasterly view toward the waterline easement immediately south of the Monsanto Seed Farm. The dirt road at the back of the photo is the location of this proposed easement.

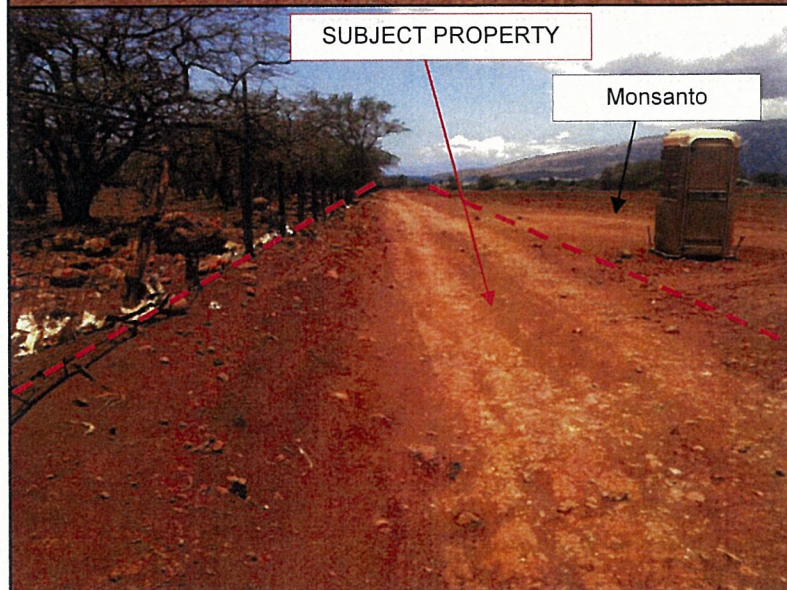


PHOTO 9

Westerly view along the proposed waterline easement. The dashed line represents the approximate property boundary. Monsanto Seed Farm is located immediately north of this gravel road.

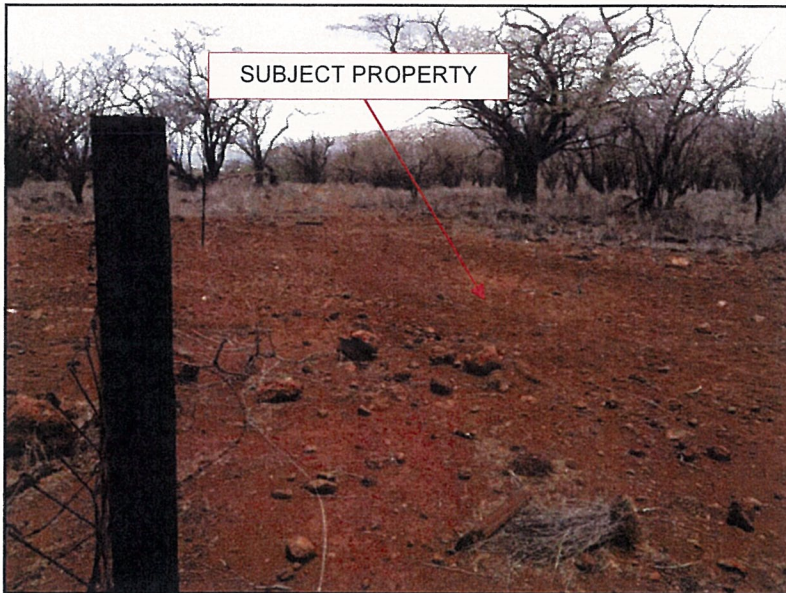


PHOTO 10

Westerly view of the approximate location for the proposed water tank and easement area Lot 1-A and Lot 1-B.

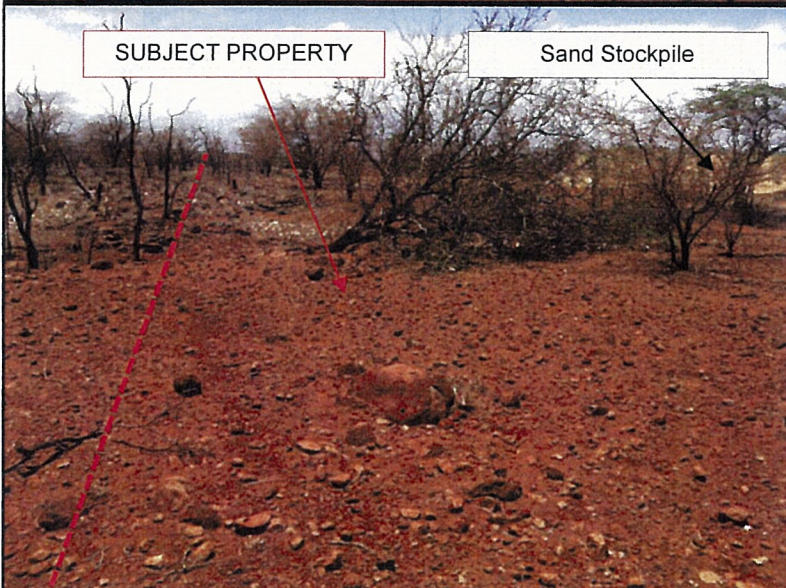


PHOTO 11

Southerly view along the the eastern property boundary. The dashed line represents the approximate property boundary. This photo was taken just south of the junction between the proposed water line easement and the roadway/utility easement. This is the approximate location for the proposed access and utility easement that continued south from Ohukai Road.

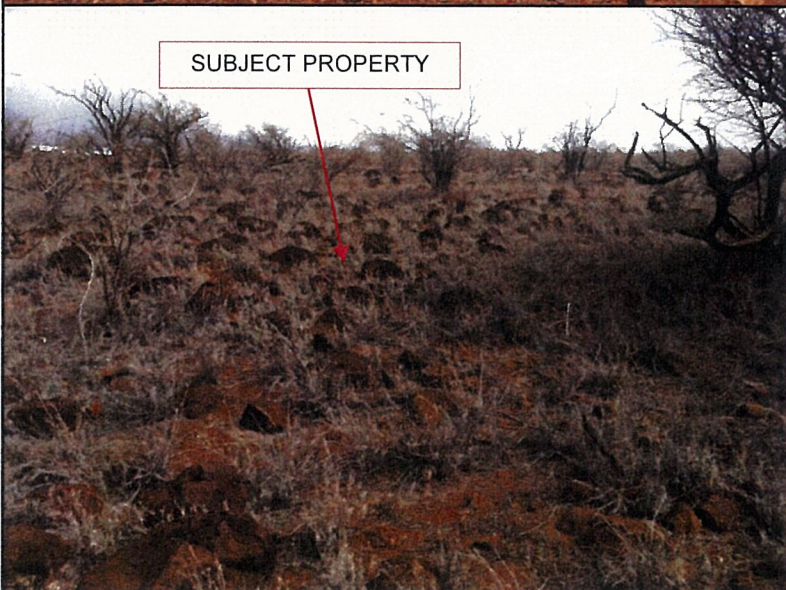


PHOTO 12

Northerly view of the proposed access and utility easement located along the eastern boundary. This photo was taken near the southeastern corner of the subject site.

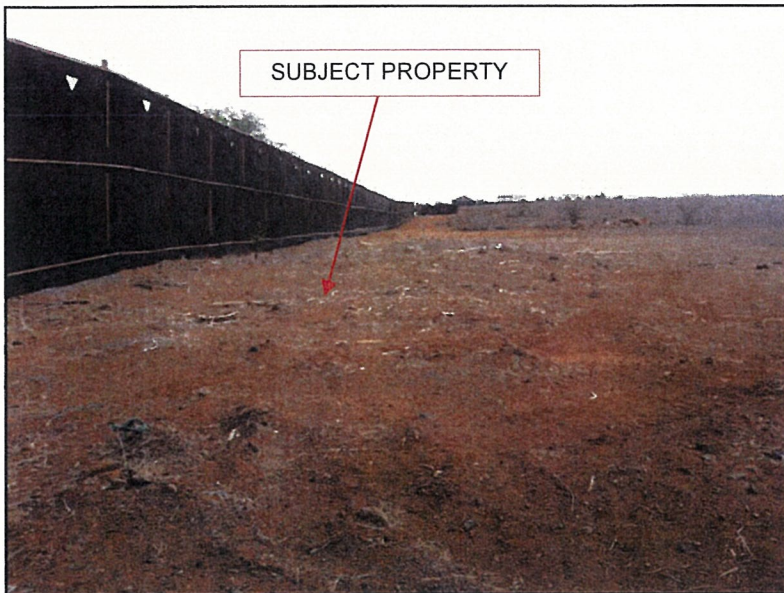


PHOTO 13

Northerly view of the western property boundary. This photo was taken from the southwest corner of the Subject Site.



PHOTO 14

Ranch enclosures located near the southwest corner of Parcel 171. MEV noted a water spigot associated with this enclosure. A water line runs from this area and traverses south to the off-site southern adjoining gulch.



PHOTO 15

Landscape debris pile and waste dumpster located near the northwest corner of the subject site. Only construction materials (wood and cardboard) were noted inside the dumpster.

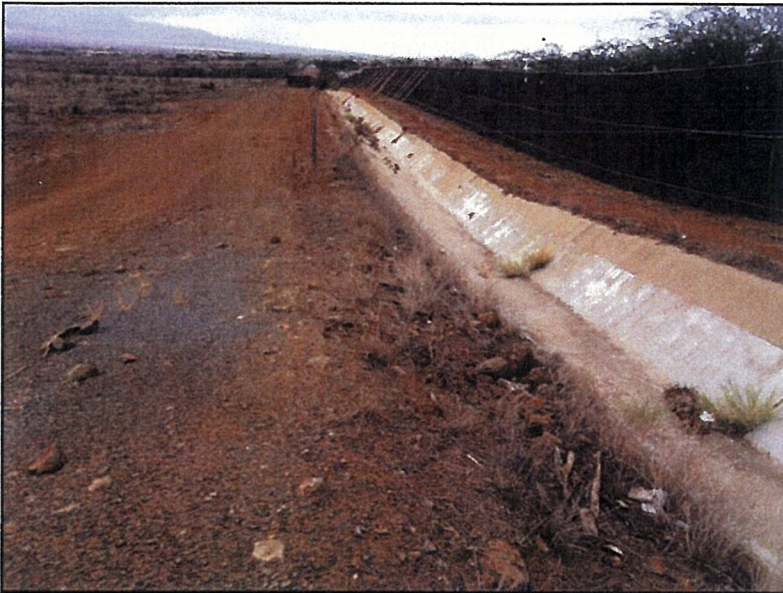


PHOTO 16

View of the concrete drain culvert located along the western property boundary. This culvert runs along the length of the western boundary and has two drainage areas leading beneath Piilani Highway.



PHOTO 17

View of the Piilani Promenade Baseyard located in the northeast corner of Parcel 169. The baseyard consists of construction materials for water culvert and drain line installation.

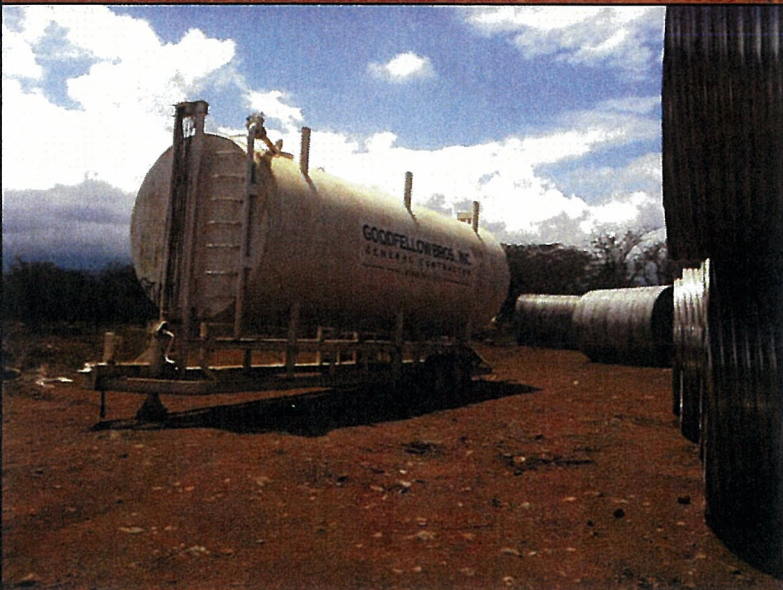


PHOTO 18

Above-ground storage tanker associated with the on-site baseyard. This tanker likely only contained water and is currently empty.





PHOTO 19

Westerly view along the proposed water line easement near the Monsanto Seed Farm. Note the paper bag debris collected near the barbed wire fence. These paper bags were used by Monsanto to prevent cross-fertilization in their seed crops. Large amount of these bags can be found along the southern boundary of the proposed water line easement.



PHOTO 20

Derelict vehicles found immediately adjacent to the proposed roadway and utility easement south of Ohukai Road. These vehicles are likely associated with the adjoining residential/agricultural lot west of this easement. MEV did not note any surface staining on the subject –site associated with these vehicles.



PHOTO 21

Water source located just north of the stockpiled sand near the northeast corner of Parcel 169.

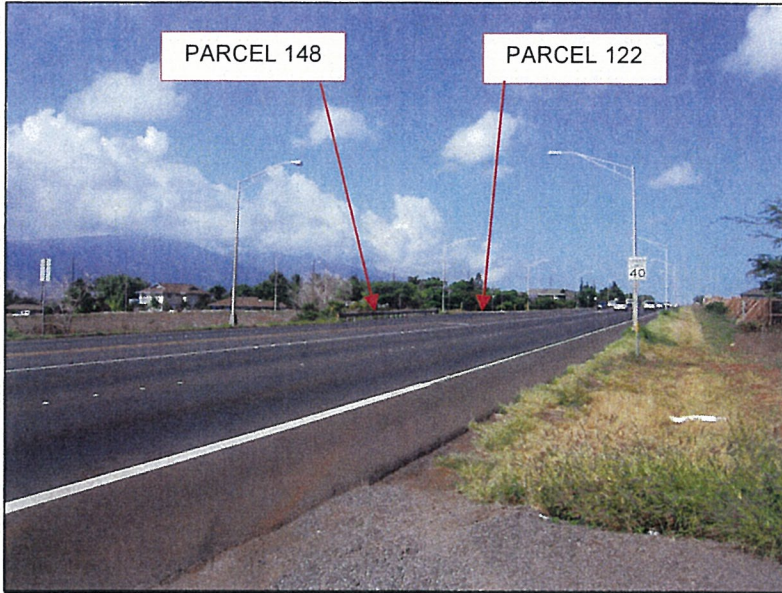


PHOTO 22

Northwesterly view of Subject Parcels 148 and 122 across Piilani Highway. Photo taken from gravel driveway into Subject Parcel 171.



PHOTO 23

Southerly view of Subject Parcel 148 along Piilani Highway. Far left across the highway is fence around Subject Parcel 171.

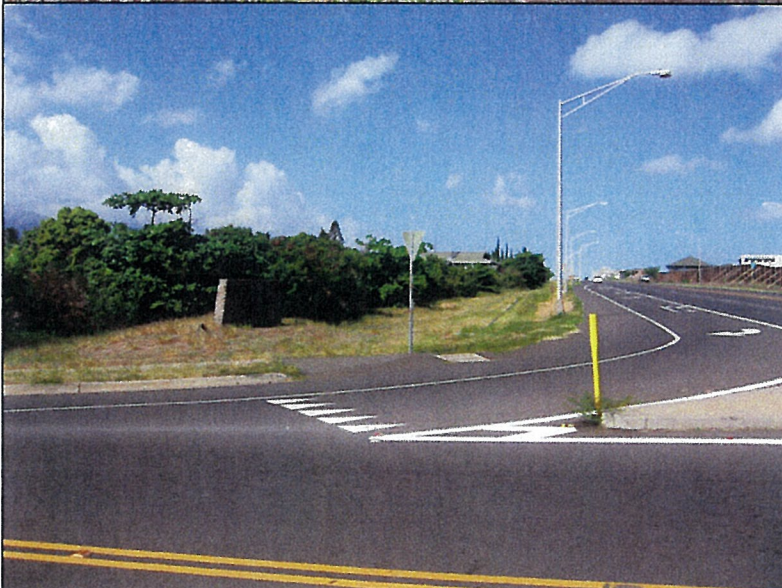


PHOTO 24

Northerly view of Subject Parcel 122 along Piilani Highway. Far right across the highway is fence around Subject Parcel 16.

# **Appendix B:**

**Regulatory Records  
Documentation**

**Site Specific Documentation**



# MALAMA Environmental

## PRELIMINARY INFORMATION FOR ENVIRONMENTAL INVESTIGATION

According to ASTM Standard 1527-05, the user's (or client's) responsibility in this investigation is to help identify the possibility of recognized environmental conditions in connection with the property. In order to qualify for one of the *Land Owner Liability Protections* (LLPs) offered by the small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. Please assist us by responding to the following request for ASTM required data and other MEV requested information you may have, or of which you may have some specialized knowledge. This questionnaire will be included in the Appendices of the final report as an indication of user assistance.

Project Name: Piilani Promenade, Kihei

MEV Project No: 1307-0292

Please supply as many of the following documents as possible:

- A.  Tax Map Key Number/Tax Code Number (2) 2-2-02:16, (2) 2-2-002:19, (2) 3-9-01:16
- B.  Title Information (*Current, and any previous ownership.*) 2A, 2B, 2C
- C.  Property Legal Description (*If Title Information is not available*)
- D.  Tax Map and/or Site Development Drawing/Plat
- E.  Special Property Information (*Well development data, endangered species listings, historical registration or environmental deed restrictions.*)
- F.  Real Estate Appraisal Report
- G.  Special Management Area Permit Report (SMA)

Please provide the following information to the best of your ability:

**1. Environmental clean-up liens that are filed or recorded against the site (40 CFR 312.25)**

Are you aware of any environmental clean up liens against the *property* that are filed or recorded under federal, tribal, state or local law?

NO

**2. Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).**

Are you aware of any AULs, such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?

NO

**3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).**

As the user of this *ESA*, do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

NO



# MALAMA Environmental

4. Relationship of the purchase price to the fair market value of the *property* if it were not contaminated (40 CFR 312.29).

Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

N/A

5. Commonly known or *reasonably ascertainable* information about the *property* if it were not contaminated (40 CFR 312.30).

Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as *user*,

- a) Do you know the past uses of the *property*? YES
- b) Do you know of specific chemicals that are present or *once* were present at the *property*? NO
- c) Do you know of spills or other chemical releases that have taken place at the *property*? NO
- d) Do you know of any environmental cleanups that have taken place at the *property*? N/A

6. The degree of obviousness of the presence or likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the *user* of this *ESA*, based on your knowledge and experience related to the *property*, are there any obvious indicators that point to the presence or likely presence of contamination at the *property*?

NO

### Additional Information Request:

1. Name of Current Owner: SAROFIM REALTY ADVISORS

2. Name of Former Owner: MAUI INDUSTRIAL PARTNERS, LLC

3. Environmental Site Assessments (ESA): Are you aware of any previous assessments: Phase I/II ESAs *Cleanup Closure Reports, Permit Characterization Reports, etc.* conducted on the subject site or *within the immediate area*? If yes, please supply details. NO

4. Local-State-Federal Inspections: Are you aware of any environmental inspections *conducted by any regulatory agency, i.e., Hawaii Dept. of Health (Environmental Health Services), OSHA, U.S. Army Corps of Engineers, Department of Land & Natural Resources, Fish & Wildlife Services, HUD, EPA, or County Wastewater or Solid Waste Division of the Public Works/Waste Management Department etc.?* If yes, please supply details. NO

5. Structures/Buildings: Are there any as-built or other construction drawings available for review? Contact Name and Telephone Number: YES, CIVIL CONSTRUCTION PLANS, C. JENCKS 250-3171

6. Site improvements? (*Renovation Date & Extent*) NONE

7. Proceedings Against the Property: Are you aware of any administrative or legal proceedings against the *property* for environmental concerns i.e., Compliance Orders, Notices of Violation? If yes, please supply



# MALAMA Environmental

details. NO

8. Specialized Historic Information: Are you aware of any previous owner, neighbor, business affiliate or other individual who might have knowledge of any special or unusual historic use of, and/or previous operations conducted on the subject property? Contact Name and Telephone Number: \_\_\_\_\_

CHARLES JENCKS 250-3178

9. Manufacturing or Processing: If there are manufacturing or processing activities conducted on-site, is there an operation flow chart, diagram or procedures manual available for review? Contact Name and Telephone Number. \_\_\_\_\_

N/A

This Phase I ESA Report is being prepared for: (Please Print)

Attention: ROBERT POYNOR VICE PRESIDENT

Organization: SARUFIM REALTY ADVISORS

Address: 8115 PRIBSTON RD., STE 400, DALLAS, TX 75225

Phone no.: (214) 692-9227 Fax no.: \_\_\_\_\_

Please List Other Organizations (Lenders) Who Will Require a Listing as "Also Prepared For:" on the Phase I ESA report cover and signature page.

(1) Attention: N/A

Organization: \_\_\_\_\_

Address: \_\_\_\_\_


(2) Attention: N/A

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

We will submit 2 signed reports for each project. If additional copies are required, an additional fee will be charged for processing.

Who Prepared This Starter Package Information?

Print Name:	<u>CHARLES JENCKS</u>	Title:	<u>OWNER</u>
Company:	<u>SECOND &amp; PECK REAL ESTATE, LLC</u>		
Address:	<u>P.O. BOX 5107 KAHULUI, MAUI, HI 96732</u>		
Tel. No.:	<u>250-3178</u>	Fax No.:	
Signature:		Date:	<u>7/21/13</u>

**Piilani Promenade**

Piilani Highway and Kaonoulu Street  
Kihei, HI 96753

Inquiry Number: 3679434.2s  
July 29, 2013

**The EDR Radius Map™ Report with GeoCheck®**

Prepared using the EDR FieldCheck® System



440 Wheelers Farms Road  
Milford, CT 06461  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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

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## EXECUTIVE SUMMARY

A search of the environmental records was conducted by Environmental Data Resources, Inc. (EDR). MEV, LLC used the EDR FieldCheck System to review and/or revise the results of this search, based on independent data verification by MEV, LLC. The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

PIILANI HIGHWAY AND KAONOULU STREET  
KIHEI, HI 96753

#### COORDINATES

Latitude (North): 20.7684000 - 20° 46' 6.24"  
Longitude (West): 156.4479000 - 156° 26' 52.44"  
Universal Transverse Mercator: Zone 4  
UTM X (Meters): 765714.1  
UTM Y (Meters): 2298479.8  
Elevation: 79 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 20156-G4 WAILUKU, HI  
Most Recent Revision: Not reported

### TARGET PROPERTY SEARCH RESULTS

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

### DATABASES WITH NO MAPPED SITES

No sites were identified in following databases.

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal NPL site list***

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

#### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

## EXECUTIVE SUMMARY

### **Federal CERCLIS list**

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

### **Federal CERCLIS NFRAP site List**

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

### **Federal RCRA CORRACTS facilities list**

CORRACTS..... Corrective Action Report

### **Federal RCRA non-CORRACTS TSD facilities list**

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### **Federal RCRA generators list**

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

### **Federal institutional controls / engineering controls registries**

US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls  
LUCIS..... Land Use Control Information System

### **Federal ERNS list**

ERNS..... Emergency Response Notification System

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

SWF/LF..... Permitted Landfills in the State of Hawaii

### **State and tribal leaking storage tank lists**

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

### **State and tribal registered storage tank lists**

INDIAN UST..... Underground Storage Tanks on Indian Land  
FEMA UST..... Underground Storage Tank Listing

### **State and tribal institutional control / engineering control registries**

ENG CONTROLS..... Engineering Control Sites  
INST CONTROL..... Sites with Institutional Controls

### **State and tribal voluntary cleanup sites**

VCP..... Voluntary Response Program Sites

## EXECUTIVE SUMMARY

INDIAN VCP..... Voluntary Cleanup Priority Listing

### **State and tribal Brownfields sites**

BROWNFIELDS..... Brownfields Sites

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### **Local Brownfield lists**

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

#### **Local Lists of Landfill / Solid Waste Disposal Sites**

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

ODI..... Open Dump Inventory

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

#### **Local Lists of Hazardous waste / Contaminated Sites**

US CDL..... Clandestine Drug Labs

CDL..... Clandestine Drug Lab Listing

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

#### **Local Land Records**

LIENS 2..... CERCLA Lien Information

#### **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System

SPILLS..... Release Notifications

SPILLS 90..... SPILLS 90 data from FirstSearch

#### **Other Ascertainable Records**

RCRA NonGen / NLR..... RCRA - Non Generators

DOT OPS..... Incident and Accident Data

DOD..... Department of Defense Sites

FUDS..... Formerly Used Defense Sites

CONSENT..... Superfund (CERCLA) Consent Decrees

ROD..... Records Of Decision

UMTRA..... Uranium Mill Tailings Sites

US MINES..... Mines Master Index File

TRIS..... Toxic Chemical Release Inventory System

TSCA..... Toxic Substances Control Act

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

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

SSTS..... Section 7 Tracking Systems

ICIS..... Integrated Compliance Information System

PADS..... PCB Activity Database System

MLTS..... Material Licensing Tracking System

RADINFO..... Radiation Information Database

## EXECUTIVE SUMMARY

FINDS.....	Facility Index System/Facility Registry System
RAATS.....	RCRA Administrative Action Tracking System
RMP.....	Risk Management Plans
UIC.....	Underground Injection Wells Listing
DRYCLEANERS.....	Permitted Drycleaner Facility Listing
AIRS.....	List of Permitted Facilities
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
COAL ASH DOE.....	Steam-Electric Plant Operation Data
PCB TRANSFORMER.....	PCB Transformer Registration Database
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
PRP.....	Potentially Responsible Parties
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
2020 COR ACTION.....	2020 Corrective Action Program List
LEAD SMELTERS.....	Lead Smelter Sites
Financial Assurance.....	Financial Assurance Information Listing

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

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

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

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

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

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

### STANDARD ENVIRONMENTAL RECORDS

#### ***State- and tribal - equivalent CERCLIS***

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Health.

An online review and analysis by MEV, LLC of the SHWS list, as provided by EDR, and dated 01/17/2013 has revealed that there are 2 SHWS sites within approximately 1 mile of the target property.

## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>SELLAND CONSTRUCTION INC, KIHE</i>	<i>454 OHUKAI RD</i>	<i>N 0 - 1/8 (0.028 mi.)</i>	<i>2</i>	<i>8</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>KIHEI CHEVRON DBA T.A. HUGHES</i>	<i>1281 S KIHEI RD</i>	<i>SSW 1/2 - 1 (1.000 ml.)</i>	<i>9</i>	<i>12</i>

### **State and tribal registered storage tank lists**

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.

An online review and analysis by MEV, LLC of the UST list, as provided by EDR, and dated 03/05/2013 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>NCT LLC</i>	<i>30 MANAO KALA PLACE</i>	<i>NW 0 - 1/8 (0.024 mi.)</i>	<i>A1</i>	<i>7</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>KIHEI MINIT STOP</i>	<i>233 PIIKEA AVE 233 PIIKE</i>	<i>S 1/8 - 1/4 (0.127 mi.)</i>	<i>6</i>	<i>10</i>

### **EDR HIGH RISK HISTORICAL RECORDS**

#### **EDR Exclusive Records**

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

An online review and analysis by MEV, LLC of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 5 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

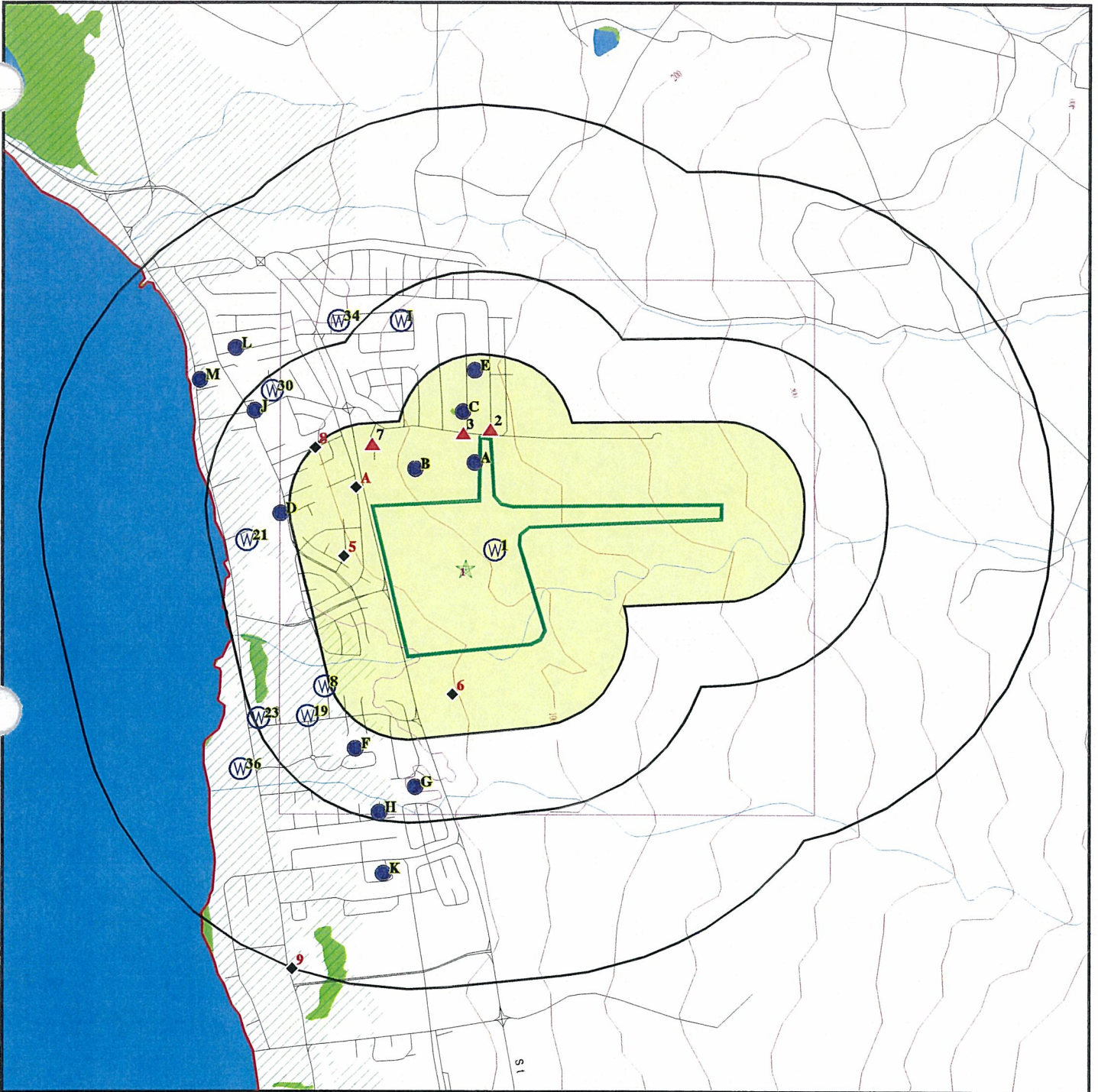
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	300 OHUKAI RD	N 0 - 1/8 (0.053 mi.)	3	9
Not reported	356 HUKU LIJ PL	NW 1/8 - 1/4 (0.187 mi.)	7	11
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	476 KAIOLA PL	NW 0 - 1/8 (0.076 mi.)	A4	10
Not reported	560 HALALAI ST	W 0 - 1/8 (0.118 mi.)	5	10
Not reported	43 KOKI PL	NW 1/8 - 1/4 (0.246 mi.)	8	12

## EXECUTIVE SUMMARY

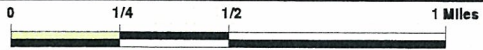
Due to poor or inadequate address information, the following sites were not mapped. Count: 15 records.

<u>Site Name</u>	<u>Database(s)</u>
MECO PAD-MOUNT TRANSFORMER NO. 932	SHWS, ENG CONTROLS, INST CONTROL
MECO PAD-MOUNT TRANSFORMER NO. 156	SHWS
MAUI ELECTRIC - SUBSTATION 35, KIH	SHWS
MECO GENERATING STATION MAALAEA	SHWS, SPILLS
KIHEI SPS #5 (EAST WELAKAHAO)	LUST, UST
KIHEI WWTP	LUST, UST, Financial Assurance
KIHEI SPS #3 (MENEHUNE SHORES)	UST
KIHEI SPS #6 (KIHEI FIRE HOUSE)	UST
KIHEI SPS #4 (YE'S ORCHARD)	UST
GTE HAWAIIAN TEL NORTH KIHEI REMOT	UST, Financial Assurance
MONSANTO COMPANY	RCRA-SQG
US NAVY KAHOOLOWE ISLAND RESERVE	RCRA-CESQG
LOCATED IN HALE PIILANI PARK	FINDS
MONSANTO PIILANI GREENHOUSE BUILDI	FINDS
PIILANI HIGHWAY INTERIM WIDENING,	FINDS

# OVERVIEW MAP - 3679434.2s



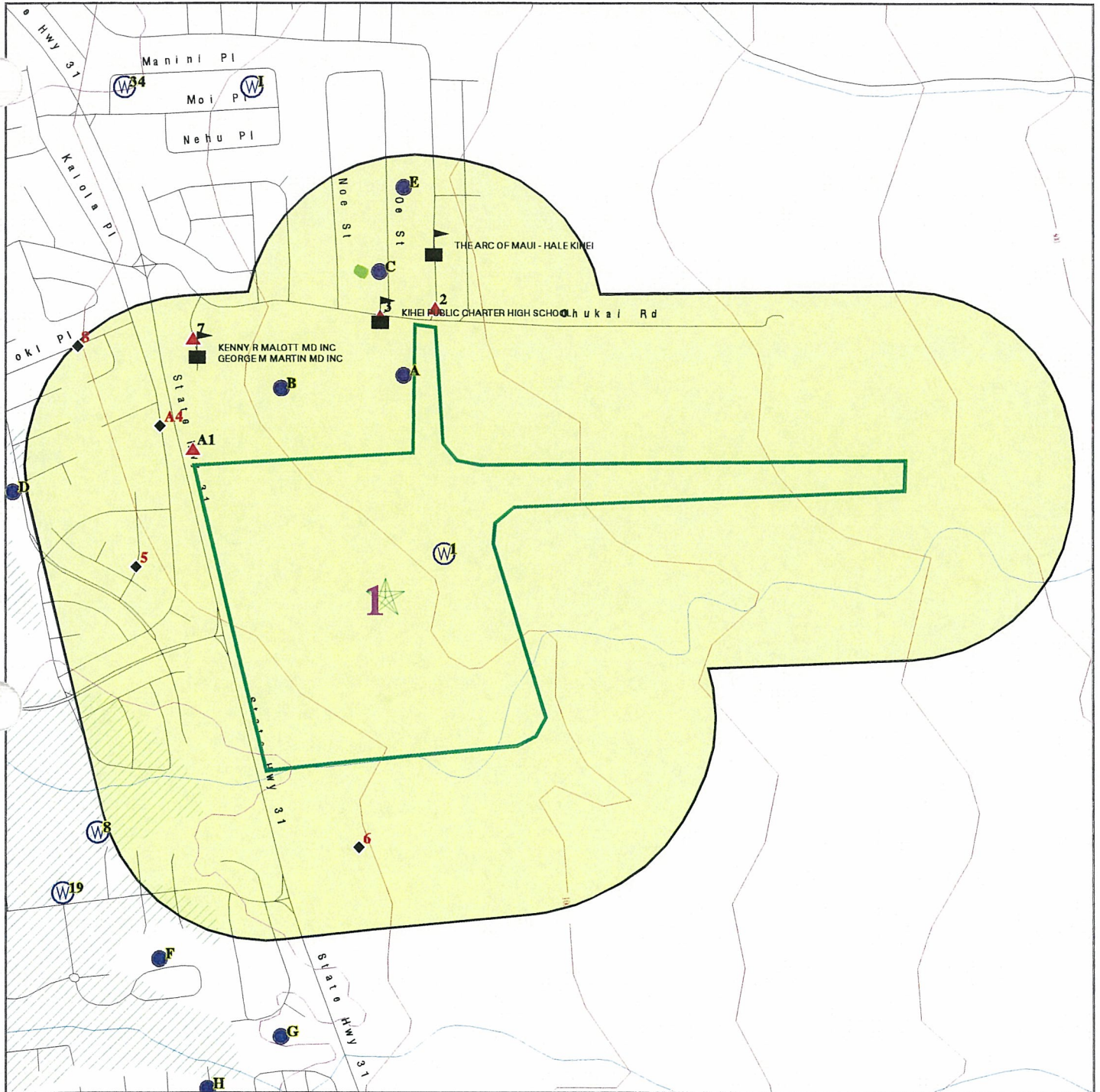
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory



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

<p><b>SITE NAME:</b> Piilani Promenade  <b>ADDRESS:</b> Piilani Highway and Kaonoulu Street                  Kihei HI 96753  <b>LAT/LONG:</b> 20.7684 / 156.4479</p>	<p><b>CLIENT:</b> MEV, LLC  <b>CONTACT:</b> Amy Mathis  <b>INQUIRY #:</b> 3679434.2s  <b>DATE:</b> July 29, 2013 7:23 pm</p>
--	--

# DETAIL MAP - 3679434.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory



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

SITE NAME: Piilani Promenade  
 ADDRESS: Piilani Highway and Kaonoulu Street  
 Kihai HI 96753  
 LAT/LONG: 20.7684 / 156.4479

CLIENT: MEV, LLC  
 CONTACT: Amy Mathis  
 INQUIRY #: 3679434.2s  
 DATE: July 29, 2013 7:23 pm



## MAP FINDINGS SUMMARY

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

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal institutional control / engineering control registries</b>								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
<b>Local Land Records</b>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		3	2	NR	NR	NR	5
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

#### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**A1**  
**NW**  
 < 1/8  
 0.024 mi.  
 126 ft.

**NCT LLC**  
**30 MANAO KALA PLACE**  
**KIHEI, HI 96753**  
  
**Site 1 of 2 in cluster A**

**UST**      **U004109528**  
**Financial Assurance**      **N/A**

**Relative:**  
**Higher**

**UST:**  
 Facility ID:            9-503832  
 Owner:                NCT LLC  
 Owner Address:       370 Dairy Road  
 Owner City,St,Zip:   Kihei, 96753 96753

**Actual:**  
**80 ft.**

Tank ID:                1  
 Date Installed:       Not reported  
**Tank Status:        Currently In Use**  
 Date Closed:          Not reported  
 Tank Capacity:       12000  
 Substance:            Gasoline

Tank ID:                2A  
 Date Installed:       Not reported  
**Tank Status:        Currently In Use**  
 Date Closed:          Not reported  
 Tank Capacity:       7000  
 Substance:            Gasoline

Tank ID:                2B  
 Date Installed:       Not reported  
**Tank Status:        Currently In Use**  
 Date Closed:          Not reported  
 Tank Capacity:       4000  
 Substance:            Diesel

**HI Financial Assurance:**

Alt Facility ID:        9-503832  
 Tank Id:                2B  
 Tank Status Desc:    Currently in Use  
 FRTYPE:                Insurance  
 Expiration Date:     06/12/2013

Alt Facility ID:        9-503832  
 Tank Id:                1  
 Tank Status Desc:    Currently in Use  
 FRTYPE:                Insurance  
 Expiration Date:     06/12/2013

Alt Facility ID:        9-503832  
 Tank Id:                2A  
 Tank Status Desc:    Currently in Use  
 FRTYPE:                Insurance  
 Expiration Date:     06/12/2013

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

EDR ID Number  
 EPA ID Number

Site

Database(s)

---

**2**                    **SELLAND CONSTRUCTION INC, KIHEI BASE YARD**                    **SHWS**    **S105262951**  
**North**            **454 OHUKAI RD**                    **SPILLS**    **N/A**  
**< 1/8**  
**0.028 mi.**  
**147 ft.**

**Relative:**  
**Higher**

**Actual:**  
**141 ft.**

**SHWS:**  
 Organization: Not reported  
 Supplemental Location Text: Ohukai Rd Base Yard  
 Island: Maui  
 Environmental Interest: Selland Construction, Inc., Kihei Base Yard  
 HID Number: Not reported  
 Facility Registry Identifier: 110013779018  
 Lead Agency: HEER  
 Program: State  
 Project Manager: Richard Palmer  
 Hazard Priority: Low  
 Potential Hazards And Controls: Hazard Undetermined  
 Organization: Not reported  
 Island: Maui  
 Location Address Line 2: Not reported  
 Location Zip Suffix: Not reported  
 Supplemental Location Text: Ohukai Rd Base Yard  
 SDAR Environmental Interest Name: Selland Construction, Inc., Kihei Base Yard  
 HID Number: Not reported  
 Facility Registry Identifier: 110013779018  
 Lead Agency: HEER  
 Program Name: State  
 Potential Hazard And Controls: Hazard Undetermined  
 Priority: Low  
 Assessment: Response Necessary  
 Response: Response Complete  
 Nature of Contamination: Found: Diesel Fuel and oil in soil.  
 Nature of Residual Contamination: Not reported  
 Use Restrictions: Undetermined  
 Engineering Control: Not reported  
 Description of Restrictions: Not reported  
 Institutional Control: Not reported  
 Within Designated Areawide Contamination: Not reported  
 Site Closure Type: Not reported  
 Document Date: Not reported  
 Document Number: Not reported  
 Document Subject: Not reported  
 Project Manager: Richard Palmer  
 Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

**HI SPILLS:**  
 Island: Maui  
 Supplemental Loc. Text: Ohukai Rd Base Yard  
 Case Number: 19940218-2  
 HID Number: Not reported  
 Facility Registry Id: 110013779018  
 Lead and Program: HEER EP&R  
 ER: Not reported  
 Units: Selland Construction Baseyard  
 Substances: Diesel Fuel and oil  
 Less Or Greater Than: Not reported  
 Numerical Quantity: Not reported  
 Units: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**SELLAND CONSTRUCTION INC, KIHEI BASE YARD (Continued)**

**S105262951**

Activity Type: Response  
Activity Lead: Not reported  
Assignment End Date: Not reported  
Result: Refer to ISST  
File Under: Selland Construction, Inc.

**3**  
**North**  
**< 1/8**  
**0.053 mi.**  
**281 ft.**

**300 OHUKAI RD**  
**KIHEI, HI 96753**

**EDR US Hist Auto Stat 1015399780**  
**N/A**

**Relative:**  
**Higher**

**EDR Historical Auto Stations:**

**Actual:**  
**127 ft.**

Name: KIHEI AUTO CLINIC  
Year: 2001  
Address: 300 OHUKAI RD

Name: KIHEI AUTO CLINIC  
Year: 2002  
Address: 300 OHUKAI RD

Name: KIHEI AUTO CLINIC  
Year: 2005  
Address: 300 OHUKAI RD

Name: KIHEI AUTO CLINIC  
Year: 2006  
Address: 300 OHUKAI RD

Name: ERNIES KWIK LUBE AUTO REPAIR  
Year: 2007  
Address: 300 OHUKAI RD

Name: ERNIES KWIK LUBE AUTO REPAIR  
Year: 2008  
Address: 300 OHUKAI RD

Name: ERNIES KWIK LUBE AUTO REPAIR  
Year: 2009  
Address: 300 OHUKAI RD

Name: ERNIES KWIK LUBE AUTO REPAIR  
Year: 2010  
Address: 300 OHUKAI RD

Name: ERNIES KWIK LUBE AUTO REPAIR  
Year: 2011  
Address: 300 OHUKAI RD

Name: ERNIES KWIK LUBE AUTO REPAIR  
Year: 2012  
Address: 300 OHUKAI RD

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

A4  
NW  
< 1/8  
0.076 mi.  
402 ft.

476 KAIOLA PL  
KIHEI, HI 96753

Site 2 of 2 in cluster A

Relative:  
Lower

EDR Historical Auto Stations:

Name: THE OLD GAS STATION INC  
Year: 2004

Actual:  
71 ft.

Address: 476 KAIOLA PL

EDR US Hist Auto Stat 1015512720  
N/A

5  
West  
< 1/8  
0.118 mi.  
623 ft.

560 HALALAI ST  
KIHEI, HI 96753

Relative:  
Lower

EDR Historical Auto Stations:

Name: BP & CO INC  
Year: 2006

Actual:  
44 ft.

Address: 560 HALALAI ST

EDR US Hist Auto Stat 1015553459  
N/A

6  
South  
1/8-1/4  
0.127 mi.  
673 ft.

KIHEI MINIT STOP  
233 PIIKEA AVE 233 PIIKEA AVE  
KIHEI, HI 96753

Relative:  
Lower

UST:

Facility ID: 9-503629  
Owner: MAUI PETROLEUM  
Owner Address: 385 HUKILIKE ST, SUITE 200  
Owner City, St, Zip: Kihei, 96753 96753

Actual:  
47 ft.

Tank ID: 3  
Date Installed: 08/31/2000  
Tank Status: **Currently In Use**  
Date Closed: Not reported  
Tank Capacity: 4000  
Substance: Diesel

Tank ID: 87  
Date Installed: 08/31/2000  
Tank Status: **Currently In Use**  
Date Closed: Not reported  
Tank Capacity: 10000  
Substance: Gasoline

Tank ID: 92  
Date Installed: 08/31/2000  
Tank Status: **Currently In Use**  
Date Closed: Not reported  
Tank Capacity: 6000  
Substance: Gasoline

UST U003762157  
Financial Assurance N/A

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

KIHEI MINIT STOP (Continued)

U003762157

HI Financial Assurance:

Alt Facility ID: 9-503629  
Tank Id: 3  
Tank Status Desc: Currently In Use  
FRTYPE: Other  
Expiration Date: Not reported

Alt Facility ID: 9-503629  
Tank Id: 87  
Tank Status Desc: Currently In Use  
FRTYPE: Other  
Expiration Date: Not reported

Alt Facility ID: 9-503629  
Tank Id: 92  
Tank Status Desc: Currently In Use  
FRTYPE: Other  
Expiration Date: Not reported

Alt Facility ID: 9-503629  
Tank Id: 3  
Tank Status Desc: Currently In Use  
FRTYPE: Insurance  
Expiration Date: 11/01/2012

Alt Facility ID: 9-503629  
Tank Id: 87  
Tank Status Desc: Currently In Use  
FRTYPE: Insurance  
Expiration Date: 11/01/2012

Alt Facility ID: 9-503629  
Tank Id: 92  
Tank Status Desc: Currently In Use  
FRTYPE: Insurance  
Expiration Date: 11/01/2012

7  
NW  
1/8-1/4  
0.187 mi.  
985 ft.

356 HUKU LII PL  
KIHEI, HI 96753

EDR US Hist Auto Stat 1015446291  
N/A

Relative:  
Higher

EDR Historical Auto Stations:

Name: TESORO HAWAII CORP  
Year: 2004  
Address: 356 HUKU LII PL

Name: TESORO HAWAII CORP  
Year: 2006  
Address: 356 HUKU LII PL

Name: 2 GO TESORO  
Year: 2007  
Address: 356 HUKU LII PL

Name: TESORO SOUTH PACIFIC PETRO

Actual:  
88 ft.



MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

(Continued)

1015446291

Year: 2008  
Address: 356 HUKU LII PL

Name: TESORO SOUTH PACIFIC PETROLEUM CO  
Year: 2009  
Address: 356 HUKU LII PL

Name: TESORO  
Year: 2010  
Address: 356 HUKU LII PL

8  
NW  
1/8-1/4  
0.246 mi.  
1298 ft.

43 KOKI PL  
KIHEI, HI 96753

EDR US Hist Auto Stat 1015491488  
N/A

Relative:  
Lower  
Actual:  
48 ft.

EDR Historical Auto Stations:

Name: FROGS REPAIR WITH MOBILE SVC  
Year: 2010  
Address: 43 KOKI PL

Name: FROGS REPAIR WITH MOBILE SERVICE  
Year: 2011  
Address: 43 KOKI PL

Name: FROGS REPAIR WITH MOBILE SERVICE  
Year: 2012  
Address: 43 KOKI PL

9  
SSW  
1/2-1  
1.000 mi.  
5279 ft.

KIHEI CHEVRON DBA T.A. HUGHES INC  
1281 S KIHEI RD  
KIHEI, HI 96753

SHWS S106818529  
SPILLS N/A

Relative:  
Lower  
Actual:  
10 ft.

SHWS:

Organization:	Not reported
Supplemental Location Text:	Not reported
Island:	Maui
Environmental Interest:	Kihei Chevron
HID Number:	Not reported
Facility Registry Identifier:	110013770099
Lead Agency:	SHWB
Program:	State
Project Manager:	Laura Young
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Maui
Location Address Line 2:	Not reported
Location Zip Suffix:	Not reported
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Kihei Chevron
HID Number:	Not reported
Facility Registry Identifier:	110013770099

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KIHEI CHEVRON DBA T.A. HUGHES INC (Continued)**

**S106818529**

Lead Agency: SHWB  
Program Name: State  
Potential Hazard And Controls: No Hazard  
Priority: NFA  
Assessment: Response Necessary  
Response: Response Complete  
Nature of Contamination: Not reported  
Nature of Residual Contamination: Not reported  
Use Restrictions: No Hazard Present For Unrestricted Residential Use  
Engineering Control: Not reported  
Description of Restrictions: Not reported  
Institutional Control: Not reported  
Within Designated Areawide Contamination: Not reported  
Site Closure Type: No Further Action Letter - Unrestricted Residential Use  
Document Date: 02/24/2004  
Document Number: 2004-065-LY  
Document Subject: Release Notification Letter, Kihei Chevron Service Station 1281 Kihei Road, Incident Case Number 200  
Project Manager: Laura Young  
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

**HI SPILLS:**

Island: Maui  
Supplemental Loc. Text: Not reported  
Case Number: 20030916-1430  
HID Number: Not reported  
Facility Registry Id: 110013770099  
Lead and Program: HEER EP&R  
ER: Not reported  
Units: Kihei Chevron Service Station Release ID 200309161430  
Substances: Unknown  
Less Or Greater Than: Not reported  
Numerical Quantity: Not reported  
Units: Not reported  
Activity Type: Response  
Activity Lead: Curtis Martin  
Assignment End Date: Not reported  
Result: SOSC NFA  
File Under: Chevron Products Company

Count: 15 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KAHO'OLAWA ISLAND	1001227536	US NAVY KAHOOLOWA ISLAND RESERVE	BASECAMP	96753	RCRA-CESQG
KIHEI	1008212074	LOCATED IN HALE PIILANI PARK	HALE PIILANI PARK		FINDS
KIHEI	U003155105	KIHEI SPS #5 (EAST WELAKAHAO)	N KIHEI RD	96753	LUST, UST
KIHEI	U003222170	KIHEI SPS #3 (MENEHUNE SHORES)	N KIHEI RD	96753	UST
KIHEI	U003222168	KIHEI SPS #6 (KIHEI FIRE HOUSE)	N KIHEI RD	96753	UST
KIHEI	U003222167	KIHEI SPS #4 (YE'S ORCHARD)	N KIHEI RD	96753	UST
KIHEI	S113230486	MECO PAD-MOUNT TRANSFORMER NO. 156	MAKENA SURF RESORT	96753	SHWS
KIHEI	U003732595	GTE HAWAIIAN TEL NORTH KIHEI REMOT	KA ONO ULU ESATE, LOT 15HALALA	96753	UST, Financial Assurance
KIHEI	1006818928	MONSANTO PIILANI GREENHOUSE BUILDI	2111 PIILANI HWY		FINDS
KIHEI	1015933228	PIILANI HIGHWAY INTERIM WIDENING,	PIILANI HIGHWAY FROM MOKULELEL		FINDS
KIHEI	1010316486	MONSANTO COMPANY	2111 PIILANI HWY	96753	RCRA-SQG
KIHEI	S113230474	MAUI ELECTRIC - SUBSTATION 35, KIH	SUBSTATION 35	96753	SHWS
KIHEI	U001236805	KIHEI WWTP	480 WELEKAHAO RD/PIILANI HWY	96753	LUST, UST, Financial Assurance
MAALAEA	S106819074	MECO GENERATING STATION MAALAEA	N KIHEI RD	96753	SHWS, SPILLS
WALEA	S113230490	MECO PAD-MOUNT TRANSFORMER NO. 932	WALEA POINT (MANAGER'S OFFICE	96753	SHWS, ENG CONTROLS, INST CONT

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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

## STANDARD ENVIRONMENTAL RECORDS

### *Federal NPL site list*

#### NPL: National Priority List

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

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

#### NPL Site Boundaries

##### Sources:

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

EPA Region 1  
Telephone 617-918-1143

EPA Region 3  
Telephone 215-814-5418

EPA Region 4  
Telephone 404-562-8033

EPA Region 5  
Telephone 312-886-6686

EPA Region 10  
Telephone 206-553-8665

EPA Region 6  
Telephone: 214-655-6659

EPA Region 7  
Telephone: 913-551-7247

EPA Region 8  
Telephone: 303-312-6774

EPA Region 9  
Telephone: 415-947-4246

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

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

#### NPL LIENS: Federal Superfund Liens

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

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal Delisted NPL site list***

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

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

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

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

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

Date of Government Version: 02/04/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: 703-412-9810
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/29/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Quarterly

### **FEDERAL FACILITY: Federal Facility Site Information listing**

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/09/2012	Telephone: 703-603-8704
Date Made Active in Reports: 12/20/2012	Last EDR Contact: 07/08/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 10/21/2013
	Data Release Frequency: Varies

## ***Federal CERCLIS NFRAP site List***

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

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

Date of Government Version: 02/05/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: 703-412-9810
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/29/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 05/09/2013
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

### **CORRACTS: Corrective Action Report**

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/21/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 6

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 07/01/2013  
Next Scheduled EDR Contact: 10/14/2013  
Data Release Frequency: Quarterly

### ***Federal RCRA non-CORRACTS TSD facilities list***

#### **RCRA-TSDF: RCRA - Treatment, Storage and Disposal**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 07/01/2013  
Next Scheduled EDR Contact: 10/14/2013  
Data Release Frequency: Quarterly

### ***Federal RCRA generators list***

#### **RCRA-LQG: RCRA - Large Quantity Generators**

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

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 07/01/2013  
Next Scheduled EDR Contact: 10/14/2013  
Data Release Frequency: Quarterly

#### **RCRA-SQG: RCRA - Small Quantity Generators**

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

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 07/01/2013  
Next Scheduled EDR Contact: 10/14/2013  
Data Release Frequency: Quarterly

#### **RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators**

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

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 07/01/2013  
Next Scheduled EDR Contact: 10/14/2013  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal institutional controls / engineering controls registries***

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

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

Date of Government Version: 03/14/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/29/2013	Telephone: 703-603-0695
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 06/10/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 09/23/2013
	Data Release Frequency: Varies

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

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

Date of Government Version: 03/14/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/29/2013	Telephone: 703-603-0695
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 06/10/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 09/23/2013
	Data Release Frequency: Varies

### **LUCIS: Land Use Control Information System**

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005	Source: Department of the Navy
Date Data Arrived at EDR: 12/11/2006	Telephone: 843-820-7326
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/20/2013
Number of Days to Update: 31	Next Scheduled EDR Contact: 09/02/2013
	Data Release Frequency: Varies

## ***Federal ERNS list***

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

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

Date of Government Version: 12/31/2012	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/17/2013	Telephone: 202-267-2180
Date Made Active in Reports: 02/15/2013	Last EDR Contact: 07/01/2013
Number of Days to Update: 29	Next Scheduled EDR Contact: 10/14/2013
	Data Release Frequency: Annually

## ***State- and tribal - equivalent CERCLIS***

### **SHWS: Sites List**

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: 01/17/2013	Source: Department of Health
Date Data Arrived at EDR: 02/28/2013	Telephone: 808-586-4249
Date Made Active in Reports: 04/09/2013	Last EDR Contact: 05/31/2013
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Semi-Annually

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

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### SWF/LF: Permitted Landfills in the State of Hawaii

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: 09/17/2012	Source: Department of Health
Date Data Arrived at EDR: 04/03/2013	Telephone: 808-586-4245
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 07/05/2013
Number of Days to Update: 37	Next Scheduled EDR Contact: 10/14/2013
	Data Release Frequency: Varies

### State and tribal leaking storage tank lists

#### LUST: Leaking Underground Storage Tank Database

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: 03/05/2013	Source: Department of Health
Date Data Arrived at EDR: 03/06/2013	Telephone: 808-586-4228
Date Made Active in Reports: 04/09/2013	Last EDR Contact: 06/03/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/16/2013
	Data Release Frequency: Semi-Annually

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

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

Date of Government Version: 09/28/2012	Source: EPA Region 1
Date Data Arrived at EDR: 11/01/2012	Telephone: 617-918-1313
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 05/01/2013
Number of Days to Update: 162	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

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

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

Date of Government Version: 02/06/2013	Source: EPA Region 4
Date Data Arrived at EDR: 02/08/2013	Telephone: 404-562-8677
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 07/24/2013
Number of Days to Update: 63	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Semi-Annually

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

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011	Source: EPA Region 6
Date Data Arrived at EDR: 09/13/2011	Telephone: 214-665-6597
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 07/24/2013
Number of Days to Update: 59	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Varies

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

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012	Source: EPA Region 7
Date Data Arrived at EDR: 02/28/2013	Telephone: 913-551-7003
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 07/24/2013
Number of Days to Update: 43	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Varies



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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

Date of Government Version: 08/27/2012	Source: EPA Region 8
Date Data Arrived at EDR: 08/28/2012	Telephone: 303-312-6271
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 07/24/2013
Number of Days to Update: 49	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Quarterly

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

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

Date of Government Version: 03/01/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2013	Telephone: 415-972-3372
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 07/24/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Quarterly

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

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

Date of Government Version: 02/05/2013	Source: EPA Region 10
Date Data Arrived at EDR: 02/06/2013	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 07/24/2013
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Quarterly

### *State and tribal registered storage tank lists*

#### UST: Underground Storage Tank Database

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: 03/05/2013	Source: Department of Health
Date Data Arrived at EDR: 03/06/2013	Telephone: 808-586-4228
Date Made Active in Reports: 04/09/2013	Last EDR Contact: 06/03/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/16/2013
	Data Release Frequency: Semi-Annually

#### INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012	Source: EPA Region 8
Date Data Arrived at EDR: 08/28/2012	Telephone: 303-312-6137
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 07/24/2013
Number of Days to Update: 49	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Quarterly

#### INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012	Source: EPA Region 7
Date Data Arrived at EDR: 02/28/2013	Telephone: 913-551-7003
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 07/24/2013
Number of Days to Update: 43	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011	Source: EPA Region 6
Date Data Arrived at EDR: 05/11/2011	Telephone: 214-665-7591
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 07/24/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Semi-Annually

### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012	Source: EPA Region 5
Date Data Arrived at EDR: 08/03/2012	Telephone: 312-886-6136
Date Made Active in Reports: 11/05/2012	Last EDR Contact: 07/24/2013
Number of Days to Update: 94	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Varies

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

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations).

Date of Government Version: 02/06/2013	Source: EPA Region 4
Date Data Arrived at EDR: 02/08/2013	Telephone: 404-562-9424
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 07/24/2013
Number of Days to Update: 63	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Semi-Annually

### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012	Source: EPA, Region 1
Date Data Arrived at EDR: 11/07/2012	Telephone: 617-918-1313
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 156	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013	Source: EPA Region 10
Date Data Arrived at EDR: 02/06/2013	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 07/24/2013
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Quarterly

### INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013	Source: EPA Region 9
Date Data Arrived at EDR: 02/26/2013	Telephone: 415-972-3368
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 07/24/2013
Number of Days to Update: 45	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 07/19/2013
Number of Days to Update: 55	Next Scheduled EDR Contact: 10/28/2013
	Data Release Frequency: Varies

## *State and tribal institutional control / engineering control registries*

### ENG CONTROLS: Engineering Control Sites

A listing of sites with engineering controls in place.

Date of Government Version: 01/17/2013	Source: Department of Health
Date Data Arrived at EDR: 02/28/2013	Telephone: 404-586-4249
Date Made Active in Reports: 04/09/2013	Last EDR Contact: 05/31/2013
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Varies

### INST CONTROL: Sites with Institutional Controls

Voluntary Remediation Program and Brownfields sites with institutional controls in place.

Date of Government Version: 01/17/2013	Source: Department of Health
Date Data Arrived at EDR: 02/28/2013	Telephone: 808-586-4249
Date Made Active in Reports: 04/09/2013	Last EDR Contact: 05/31/2013
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Varies

## *State and tribal voluntary cleanup sites*

### VCP: Voluntary Response Program Sites

Sites participating in the Voluntary Response Program. The purpose of the VRP is to streamline the cleanup process in a way that will encourage prospective developers, lenders, and purchasers to voluntarily cleanup properties.

Date of Government Version: 01/17/2013	Source: Department of Health
Date Data Arrived at EDR: 02/28/2013	Telephone: 808-586-4249
Date Made Active in Reports: 04/09/2013	Last EDR Contact: 05/31/2013
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Varies

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012	Source: EPA, Region 1
Date Data Arrived at EDR: 10/02/2012	Telephone: 617-918-1102
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 07/02/2013
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/14/2013
	Data Release Frequency: Varies

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

## *State and tribal Brownfields sites*

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### BROWNFIELDS: Brownfields Sites

With certain legal exclusions and additions, the term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Date of Government Version: 01/17/2013  
Date Data Arrived at EDR: 02/28/2013  
Date Made Active in Reports: 04/09/2013  
Number of Days to Update: 40

Source: Department of Health  
Telephone: 808-586-4249  
Last EDR Contact: 05/31/2013  
Next Scheduled EDR Contact: 09/09/2013  
Data Release Frequency: Varies

### ADDITIONAL ENVIRONMENTAL RECORDS

#### *Local Brownfield lists*

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

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/10/2012  
Date Data Arrived at EDR: 12/11/2012  
Date Made Active in Reports: 12/20/2012  
Number of Days to Update: 9

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 06/25/2013  
Next Scheduled EDR Contact: 10/07/2013  
Data Release Frequency: Semi-Annually

#### *Local Lists of Landfill / Solid Waste Disposal Sites*

#### DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 07/26/2013  
Next Scheduled EDR Contact: 11/11/2013  
Data Release Frequency: No Update Planned

#### ODI: Open Dump Inventory

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

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

#### INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 05/03/2013  
Next Scheduled EDR Contact: 08/19/2013  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Hazardous waste / Contaminated Sites**

### **US CDL: Clandestine Drug Labs**

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/04/2013	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 03/12/2013	Telephone: 202-307-1000
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 06/03/2013
Number of Days to Update: 59	Next Scheduled EDR Contact: 09/16/2013
	Data Release Frequency: Quarterly

### **CDL: Clandestine Drug Lab Listing**

A listing of clandestine drug lab site locations.

Date of Government Version: 08/04/2010	Source: Department of Health
Date Data Arrived at EDR: 09/10/2010	Telephone: 808-586-4249
Date Made Active in Reports: 10/22/2010	Last EDR Contact: 06/03/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 09/16/2013
	Data Release Frequency: Varies

### **US HIST CDL: National Clandestine Laboratory Register**

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 11/19/2008	Telephone: 202-307-1000
Date Made Active in Reports: 03/30/2009	Last EDR Contact: 03/23/2009
Number of Days to Update: 131	Next Scheduled EDR Contact: 06/22/2009
	Data Release Frequency: No Update Planned

## **Local Land Records**

### **LIENS 2: CERCLA Lien Information**

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/25/2013	Telephone: 202-564-6023
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 07/24/2013
Number of Days to Update: 15	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Varies

## **Records of Emergency Release Reports**

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

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

Date of Government Version: 12/31/2012	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 01/03/2013	Telephone: 202-366-4555
Date Made Active in Reports: 02/27/2013	Last EDR Contact: 07/01/2013
Number of Days to Update: 55	Next Scheduled EDR Contact: 10/14/2013
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### SPILLS: Release Notifications

Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1988.

Date of Government Version: 01/31/2012	Source: Department of Health
Date Data Arrived at EDR: 02/28/2012	Telephone: 808-586-4249
Date Made Active in Reports: 04/04/2012	Last EDR Contact: 05/31/2013
Number of Days to Update: 36	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Varies

### SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 03/10/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/11/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### *Other Ascertainable Records*

#### RCRA NonGen / NLR: RCRA - Non Generators

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

Date of Government Version: 02/12/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/15/2013	Telephone: (415) 495-8895
Date Made Active in Reports: 02/27/2013	Last EDR Contact: 07/01/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 10/14/2013
	Data Release Frequency: Varies

#### DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 05/07/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/19/2013
	Data Release Frequency: Varies

#### DOD: Department of Defense Sites

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

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/19/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 10/28/2013
	Data Release Frequency: Semi-Annually

#### FUDS: Formerly Used Defense Sites

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

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 02/26/2013  
Date Made Active in Reports: 03/13/2013  
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 06/10/2013  
Next Scheduled EDR Contact: 09/23/2013  
Data Release Frequency: Varies

### CONSENT: Superfund (CERCLA) Consent Decrees

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

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 01/15/2013  
Date Made Active in Reports: 03/13/2013  
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 06/25/2013  
Next Scheduled EDR Contact: 10/14/2013  
Data Release Frequency: Varies

### ROD: Records Of Decision

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

Date of Government Version: 12/18/2012  
Date Data Arrived at EDR: 03/13/2013  
Date Made Active in Reports: 04/12/2013  
Number of Days to Update: 30

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 06/11/2013  
Next Scheduled EDR Contact: 09/23/2013  
Data Release Frequency: Annually

### UMTRA: Uranium Mill Tailings Sites

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

Date of Government Version: 09/14/2010  
Date Data Arrived at EDR: 10/07/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 146

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 05/28/2013  
Next Scheduled EDR Contact: 09/09/2013  
Data Release Frequency: Varies

### US MINES: Mines Master Index File

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

Date of Government Version: 02/05/2013  
Date Data Arrived at EDR: 04/18/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 06/04/2013  
Next Scheduled EDR Contact: 09/16/2013  
Data Release Frequency: Semi-Annually

### TRIS: Toxic Chemical Release Inventory System

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

Date of Government Version: 12/31/2009  
Date Data Arrived at EDR: 09/01/2011  
Date Made Active in Reports: 01/10/2012  
Number of Days to Update: 131

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 05/29/2013  
Next Scheduled EDR Contact: 09/09/2013  
Data Release Frequency: Annually

### TSCA: Toxic Substances Control Act

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

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2006  
Date Data Arrived at EDR: 09/29/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 64

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 06/25/2013  
Next Scheduled EDR Contact: 10/07/2013  
Data Release Frequency: Every 4 Years

**FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances  
Telephone: 202-566-1667  
Last EDR Contact: 05/28/2013  
Next Scheduled EDR Contact: 09/09/2013  
Data Release Frequency: Quarterly

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA  
Telephone: 202-566-1667  
Last EDR Contact: 05/28/2013  
Next Scheduled EDR Contact: 09/09/2013  
Data Release Frequency: Quarterly

**HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing**

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2007  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

**HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing**

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

**SSTS: Section 7 Tracking Systems**

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



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2009  
Date Data Arrived at EDR: 12/10/2010  
Date Made Active in Reports: 02/25/2011  
Number of Days to Update: 77

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 07/24/2013  
Next Scheduled EDR Contact: 11/11/2013  
Data Release Frequency: Annually

### ICIS: Integrated Compliance Information System

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

Date of Government Version: 07/20/2011  
Date Data Arrived at EDR: 11/10/2011  
Date Made Active in Reports: 01/10/2012  
Number of Days to Update: 61

Source: Environmental Protection Agency  
Telephone: 202-564-5088  
Last EDR Contact: 07/01/2013  
Next Scheduled EDR Contact: 10/28/2013  
Data Release Frequency: Quarterly

### PADS: PCB Activity Database System

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

Date of Government Version: 11/01/2012  
Date Data Arrived at EDR: 01/16/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 114

Source: EPA  
Telephone: 202-566-0500  
Last EDR Contact: 07/17/2013  
Next Scheduled EDR Contact: 10/28/2013  
Data Release Frequency: Annually

### MLTS: Material Licensing Tracking System

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

Date of Government Version: 03/14/2013  
Date Data Arrived at EDR: 03/20/2013  
Date Made Active in Reports: 07/10/2013  
Number of Days to Update: 112

Source: Nuclear Regulatory Commission  
Telephone: 301-415-7169  
Last EDR Contact: 07/10/2013  
Next Scheduled EDR Contact: 09/23/2013  
Data Release Frequency: Quarterly

### RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013  
Date Data Arrived at EDR: 04/11/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 29

Source: Environmental Protection Agency  
Telephone: 202-343-9775  
Last EDR Contact: 07/12/2013  
Next Scheduled EDR Contact: 10/21/2013  
Data Release Frequency: Quarterly

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

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

Date of Government Version: 03/08/2013  
Date Data Arrived at EDR: 03/21/2013  
Date Made Active in Reports: 07/10/2013  
Number of Days to Update: 111

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 06/13/2013  
Next Scheduled EDR Contact: 09/23/2013  
Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### RAATS: RCRA Administrative Action Tracking System

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

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

### RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/25/2012	Telephone: 202-564-8600
Date Made Active in Reports: 07/10/2012	Last EDR Contact: 07/24/2013
Number of Days to Update: 46	Next Scheduled EDR Contact: 11/11/2013
	Data Release Frequency: Varies

### BRS: Biennial Reporting System

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

Date of Government Version: 12/31/2011	Source: EPA/NTIS
Date Data Arrived at EDR: 02/26/2013	Telephone: 800-424-9346
Date Made Active in Reports: 04/19/2013	Last EDR Contact: 05/30/2013
Number of Days to Update: 52	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Biennially

### UIC: Underground Injection Wells Listing

A listing of underground injection well locations.

Date of Government Version: 02/07/2013	Source: Department of Health
Date Data Arrived at EDR: 02/12/2013	Telephone: 808-586-4258
Date Made Active in Reports: 04/09/2013	Last EDR Contact: 06/03/2013
Number of Days to Update: 56	Next Scheduled EDR Contact: 09/16/2013
	Data Release Frequency: Varies

### DRYCLEANERS: Permitted Drycleaner Facility Listing

A listing of permitted drycleaner facilities in the state.

Date of Government Version: 12/31/2012	Source: Department of Health
Date Data Arrived at EDR: 01/25/2013	Telephone: 808-586-4200
Date Made Active in Reports: 02/28/2013	Last EDR Contact: 07/18/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/21/2013
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### AIRS: List of Permitted Facilities

A listing of permitted facilities in the state.

Date of Government Version: 04/24/2013  
Date Data Arrived at EDR: 04/25/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 15

Source: Department of Health  
Telephone: 808-586-4200  
Last EDR Contact: 07/18/2013  
Next Scheduled EDR Contact: 10/21/2013  
Data Release Frequency: Varies

### INDIAN RESERV: Indian Reservations

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

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 07/19/2013  
Next Scheduled EDR Contact: 10/28/2013  
Data Release Frequency: Semi-Annually

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011  
Date Data Arrived at EDR: 03/09/2011  
Date Made Active in Reports: 05/02/2011  
Number of Days to Update: 54

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 07/18/2013  
Next Scheduled EDR Contact: 11/04/2013  
Data Release Frequency: Varies

### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011  
Date Data Arrived at EDR: 05/18/2012  
Date Made Active in Reports: 05/25/2012  
Number of Days to Update: 7

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 05/17/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Varies

### LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013  
Date Data Arrived at EDR: 02/14/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 13

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 07/03/2013  
Next Scheduled EDR Contact: 10/21/2013  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Financial Assurance: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 03/18/2013	Source: Department of Health
Date Data Arrived at EDR: 03/19/2013	Telephone: 808-586-4226
Date Made Active in Reports: 04/09/2013	Last EDR Contact: 06/13/2013
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/30/2013
	Data Release Frequency: Varies

### COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/03/2011	Telephone: N/A
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 06/14/2013
Number of Days to Update: 77	Next Scheduled EDR Contact: 09/23/2013
	Data Release Frequency: Varies

### COAL ASH DOE: Steam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 07/19/2013
Number of Days to Update: 76	Next Scheduled EDR Contact: 10/28/2013
	Data Release Frequency: Varies

### PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 05/03/2013
Number of Days to Update: 83	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/15/2013	Telephone: 202-566-1917
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 05/20/2013
Number of Days to Update: 56	Next Scheduled EDR Contact: 09/02/2013
	Data Release Frequency: Quarterly

### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 12/31/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/18/2013	Telephone: 617-520-3000
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 05/10/2013
Number of Days to Update: 81	Next Scheduled EDR Contact: 08/26/2013
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 12/18/2012	Source: EPA
Date Data Arrived at EDR: 04/04/2013	Telephone: 202-564-6023
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 07/03/2013
Number of Days to Update: 97	Next Scheduled EDR Contact: 10/14/2013
	Data Release Frequency: Quarterly

### US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013	Source: EPA
Date Data Arrived at EDR: 01/30/2013	Telephone: 202-564-5962
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 06/25/2013
Number of Days to Update: 100	Next Scheduled EDR Contact: 10/14/2013
	Data Release Frequency: Annually

### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/19/2013
Number of Days to Update: 339	Next Scheduled EDR Contact: 10/28/2013
	Data Release Frequency: N/A

### US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 01/23/2013	Source: EPA
Date Data Arrived at EDR: 01/30/2013	Telephone: 202-564-5962
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 06/25/2013
Number of Days to Update: 100	Next Scheduled EDR Contact: 10/14/2013
	Data Release Frequency: Annually

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

### EDR MGP: EDR Proprietary Manufactured Gas Plants

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

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

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

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

### EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

### EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

### EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

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: Rextag Strategies Corp.  
Telephone: (281) 769-2247  
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**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 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

### **STREET AND ADDRESS INFORMATION**

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## GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

PIILANI PROMENADE  
PIILANI HIGHWAY AND KAONOULU STREET  
KIHEI, HI 96753

### TARGET PROPERTY COORDINATES

Latitude (North):	20.7684 - 20° 46' 6.24"
Longitude (West):	156.4479 - 156° 26' 52.44"
Universal Transverse Mercator:	Zone 4
UTM X (Meters):	765714.1
UTM Y (Meters):	2298479.8
Elevation:	79 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	20156-G4 WAILUKU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.



# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

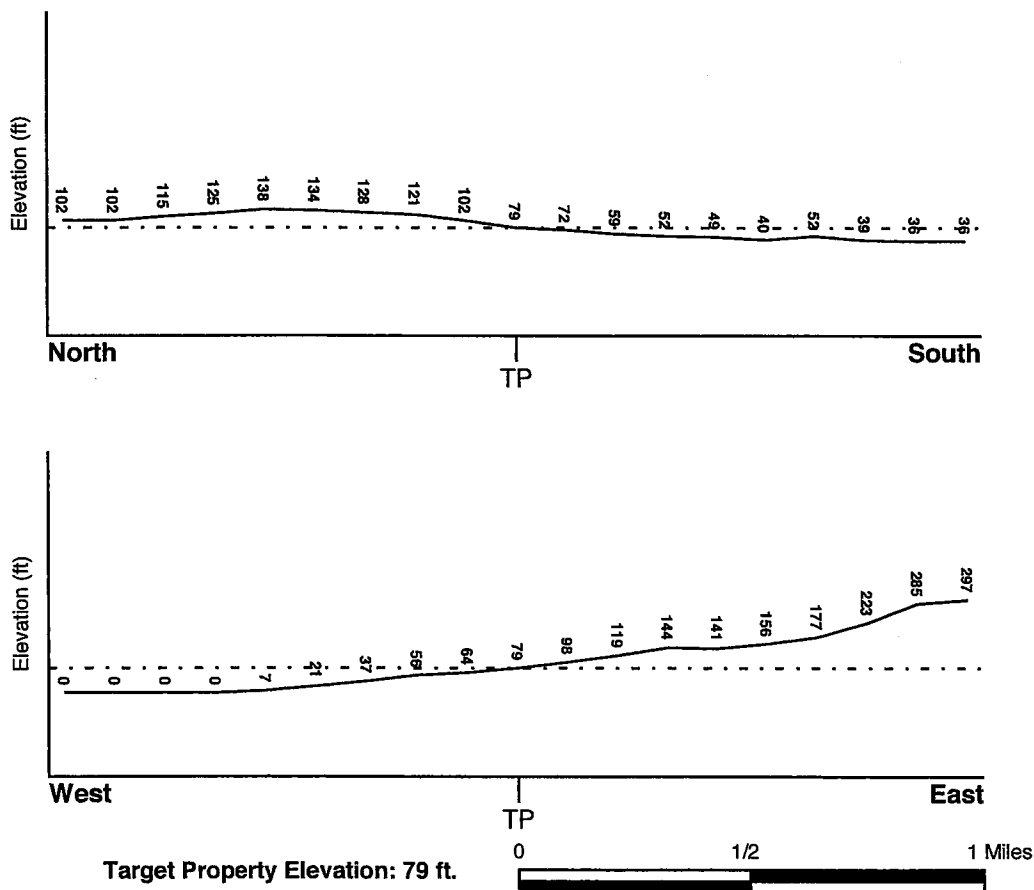
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

### **FEMA FLOOD ZONE**

<u>Target Property County</u> MAUI, HI	FEMA Flood <u>Electronic Data</u> YES - refer to the Overview Map and Detail Map
Flood Plain Panel at Target Property:	1500030265C - FEMA Q3 Flood data
Additional Panels in search area:	1500030255B - FEMA Q3 Flood data

### **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u> NOT AVAILABLE	NWI Electronic <u>Data Coverage</u> YES - refer to the Overview Map and Detail Map
---	--

### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u> <u>FROM TP</u>	<u>GENERAL DIRECTION</u> <u>GROUNDWATER FLOW</u>
Not Reported		

## **GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY**

### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### **GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

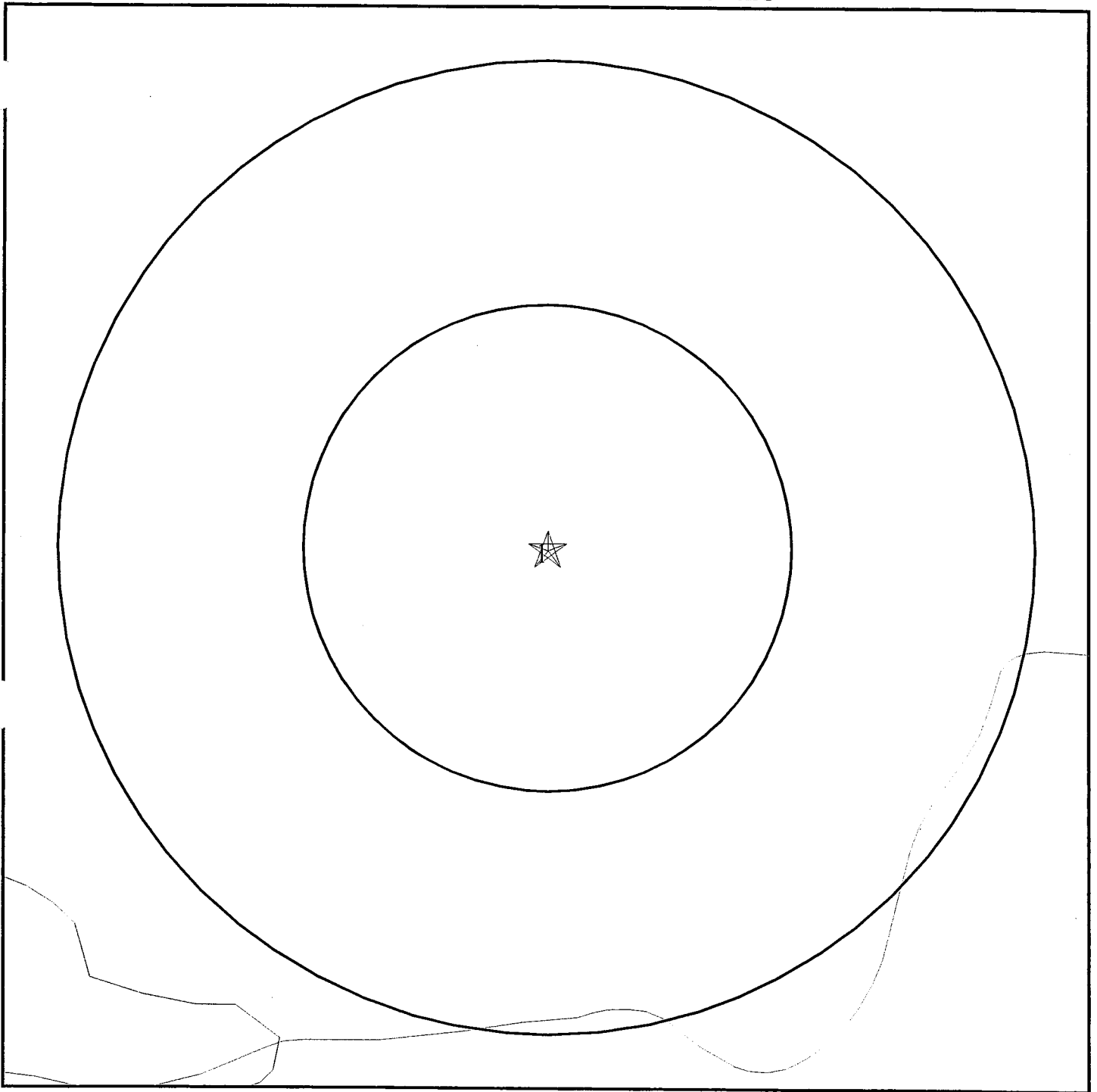
#### **ROCK STRATIGRAPHIC UNIT**

#### **GEOLOGIC AGE IDENTIFICATION**

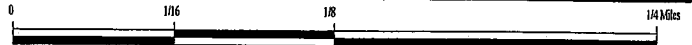
Era:	-	Category:	-
System:	-		
Series:	-		
Code:	N/A (decoded above as Era, System & Series)		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 3679434.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Piilani Promenade  
ADDRESS: Piilani Highway and Kaonoulu Street  
          Kihei HI 96753  
LAT/LONG: 20.7684 / 156.4479

CLIENT: MEV, LLC  
CONTACT: Amy Mathis  
INQUIRY #: 3679434.2s  
DATE: July 29, 2013 7:24 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

#### Soil Map ID: 1

Soil Component Name: Waiakoa

Soil Surface Texture: extremely stony silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 71 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	0 inches	extremely stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.02	Max: Min:
2	0 inches	20 inches	extremely stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.02	Max: Min:
3	20 inches	27 inches	stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.02	Max: Min:
4	27 inches	31 inches	bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.02	Max: Min:

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A3	USGS40000268873	1/4 - 1/2 Mile North
B5	USGS40000268872	1/4 - 1/2 Mile NNW
C7	USGS40000268876	1/4 - 1/2 Mile North
D9	USGS40000268869	1/2 - 1 Mile WNW
E12	USGS40000268879	1/2 - 1 Mile North
D14	USGS40000268870	1/2 - 1 Mile WNW
F15	USGS40000268867	1/2 - 1 Mile SSW
E18	USGS40000268882	1/2 - 1 Mile North
G20	USGS40000268864	1/2 - 1 Mile SSW
H24	USGS40000268863	1/2 - 1 Mile SSW
I25	USGS40000268886	1/2 - 1 Mile NNW
I27	USGS40000268887	1/2 - 1 Mile NNW
J29	USGS40000268875	1/2 - 1 Mile NW
30	USGS40000268878	1/2 - 1 Mile NW
J32	USGS40000268877	1/2 - 1 Mile NW
34	USGS40000268888	1/2 - 1 Mile NNW
K35	USGS40000268861	1/2 - 1 Mile SSW
K38	USGS40000268860	1/2 - 1 Mile SSW
L39	USGS40000268883	1/2 - 1 Mile NW
M42	USGS40000268880	1/2 - 1 Mile NW

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

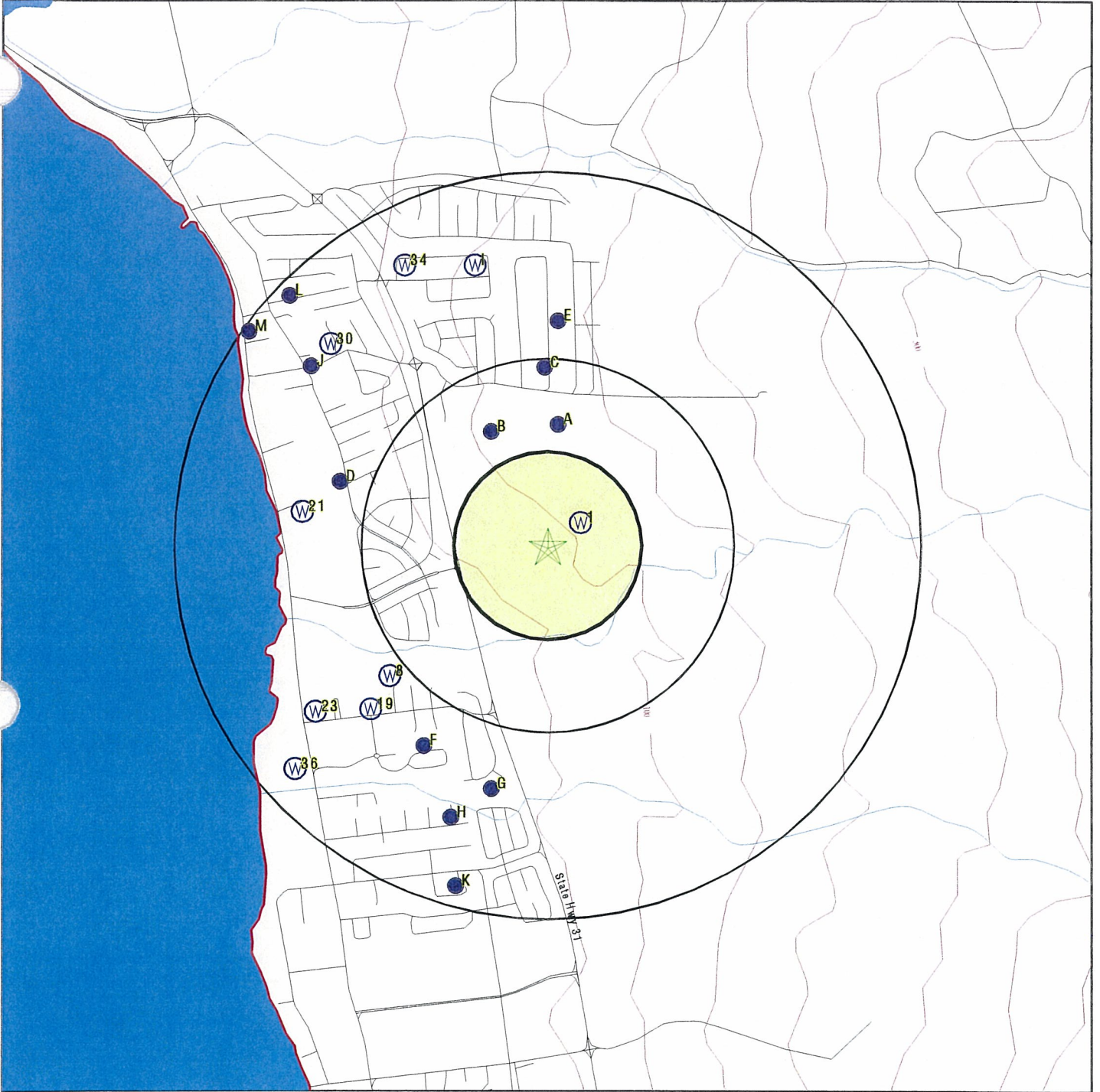
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	HI8000000001116	0 - 1/8 Mile NE

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI8000000001123	1/4 - 1/2 Mile North
B4	HI8000000001122	1/4 - 1/2 Mile NNW
C6	HI8000000001129	1/4 - 1/2 Mile North
8	HI8000000001112	1/2 - 1 Mile SW
D10	HI8000000001118	1/2 - 1 Mile WNW
E11	HI8000000001132	1/2 - 1 Mile North
D13	HI8000000001119	1/2 - 1 Mile WNW
E16	HI8000000001134	1/2 - 1 Mile North
F17	HI8000000001109	1/2 - 1 Mile SSW
19	HI8000000001111	1/2 - 1 Mile SW
21	HI8000000001117	1/2 - 1 Mile West
G22	HI8000000001107	1/2 - 1 Mile SSW
23	HI8000000001110	1/2 - 1 Mile SW
H26	HI8000000001106	1/2 - 1 Mile SSW
J28	HI8000000001126	1/2 - 1 Mile NW
J31	HI8000000001128	1/2 - 1 Mile NW
J33	HI8000000001130	1/2 - 1 Mile NW
36	HI8000000001108	1/2 - 1 Mile SW
L37	HI8000000001135	1/2 - 1 Mile NW
K40	HI8000000001104	1/2 - 1 Mile SSW
M41	HI8000000001131	1/2 - 1 Mile NW

PHYSICAL SETTING SOURCE MAP - 3 9434.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: Piilani Promenade  
 ADDRESS: Piilani Highway and Kaonoulu Street  
 Kihei HI 96753  
 LAT/LONG: 20.7684 / 156.4479

CLIENT: MEV, LLC  
 CONTACT: Amy Mathis  
 INQUIRY #: 3679434.2s  
 DATE: July 29, 2013 7:24 pm



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**1**  
**NE**  
**0 - 1/8 Mile**  
**Higher**      **HI WELLS**      **HI800000001116**

Objectid:	3044	Wid:	6-4626-002
Island:	Maui	Well name:	Kaonoulu Irr 1
Old name:	Not Reported		
Yr drilled:	2012		
Driller:	Moreira		
Quad map:	0		
Long83dd:	-156.44655		
Lat83dd:	20.7693		
Gps:	0	Utm:	0
Owner user:	Charles Jenks	Old number:	Not Reported
Well type:	ROT	Casing dia:	10
Ground el:	118		
Well depth:	133		
Solid case:	123	Perf case:	133
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Init head2:	Not Reported
Init head:	1.12		
Init head3:	Not Reported		
Init cl:	180		
Test date:	1/17/2012	Test gpm:	179
Test ddown:	2.46	Test chlor:	180
Test temp:	73.5	Test unit:	F
Pump gpm:	150		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	2012		
Draft yr:	Not Reported	Bot hole:	-15
Bot solid:	-5	Bot perf:	-15
Spec capac:	Not Reported		
Pump mgd:	.216		
Draft mgd:	Not Reported	Pump elev:	-8
Pump depth:	128	Tmk:	(2) 3-9-001:169
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	02/23/2012
Pir:	2/23/2012	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI800000001116

**A2**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**HI WELLS**      **HI800000001123**

Objectid:	3058	Wid:	6-4627-014
Island:	Maui	Well name:	Tmk 3-9-01-34
Old name:	Not Reported		
Yr drilled:	1969		
Driller:	OCEAN VIEW		
Quad map:	8		
Long83dd:	-156.4475		
Lat83dd:	20.7730555556		
Gps:	0	Utm:	-1
Owner user:	Hashimoto T	Old number:	226-

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well type:	ROT	Casing dia:	Not Reported
Ground el:	130		
Well depth:	200		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Init head:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	24	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-70
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1969
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001123

**A3**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000268873**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204635156270101		
Monloc name:	6-4627-14 Waiakea Homesteads, Maui, HI		
Monloc type:	Well		
Monloc desc:	former local no. W226		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7731899
Longitude:	-156.447459	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	130.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19690101	Welldepth:	200
Welldepth units:	ft	Wellholedepth:	200
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**B4**  
**NNW**  
1/4 - 1/2 Mile  
Higher

**HI WELLS**      **HI8000000001122**

Objectid:	3052	Wid:	6-4627-008
Island:	Maui	Well name:	Tmk 3-9-01-33
Old name:	Not Reported		
Yr drilled:	1948		
Driller:	MULLIN		
Quad map:	8		
Long83dd:	-156.450277778		
Lat83dd:	20.772777778		
Gps:	0	Utm:	-1
Owner user:	Hashimoto T	Old number:	225-
Well type:	Not Reported	Casing dia:	6
Ground el:	Not Reported		
Well depth:	116		
Solid case:	85	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	100
Test ddown:	Not Reported	Test chlor:	435
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	12	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TK		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1948
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001122

**B5**  
**NNW**  
1/4 - 1/2 Mile  
Higher

**FED USGS**      **USGS40000268872**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204634156271101		
Monloc name:	6-4627-08 W225		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7729122
Longitude:	-156.4502367	Sourcemap scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	105.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19480101	Welldepth:	116
Welldepth units:	ft	Wellholedepth:	116
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-07-16	92.28	

**C6**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**HI WELLS**

**HI800000001129**

Objectid:	3059	Wid:	6-4627-015
Island:	Maui	Well name:	Tmk 3-9-26-43
Old name:	Not Reported		
Yr drilled:	1969		
Driller:	OCEAN VIEW		
Quad map:	8		
Long83dd:	-156.448055556		
Lat83dd:	20.7752777778		
Gps:	0	Utm:	-1
Owner user:	Neubauer A	Old number:	227-
Well type:	ROT	Casing dia:	4
Ground el:	Not Reported		
Well depth:	110		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Use:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Trnk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1969
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001129

**C7**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000268876**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204643156270301		
Monloc name:	6-4627-15 W227		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7754119
Longitude:	-156.4480145	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	130.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19690101	Welldepth:	110
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**8**  
**SW**  
**1/2 - 1 Mile**  
**Lower**

**HI WELLS      HI8000000001112**

Objectid:	3034	Wid:	6-4527-018
Island:	Maui	Well name:	Kaonoulu 5
Old name:	Not Reported		
Yr drilled:	2007		
Driller:	Not Reported		
Quad map:	6		
Long83dd:	-156.454444444		
Lat83dd:	20.7633333333		
Gps:	-1	Utm:	0
Owner user:	Not Reported	Old number:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well type:	ROT	Casing dia:	6
Ground el:	18		
Well depth:	50		
Solid case:	20	Perf case:	50
Use:	IRR - Landscape/Water Features	Use year:	Not Reported
Init head:	3.14	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	184		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	60		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TK		
Pump yr:	2006		
Draft yr:	Not Reported	Bot hole:	-32
Bot solid:	-2	Bot perf:	-32
Spec capac:	Not Reported		
Pump mgd:	.086		
Draft mgd:	Not Reported	Pump elev:	-28
Pump depth:	46	Trmk:	(2) 3-9-001:161
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	04/16/2007
Pir:	9/16/2009	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001112

**D9  
WNW  
1/2 - 1 Mile  
Lower**

**FED USGS      USGS40000268869**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204626156273301		
Monloc name:	6-4627-11 W220		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7706902
Longitude:	-156.4563476	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	18.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19490101	Welldepth:	19
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**D10**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**HI WELLS      HI8000000001118**

Objectid:	3055	Wid:	6-4627-011
Island:	Maui	Well name:	Tmk 3-9-01-99
Old name:	Not Reported		
Yr drilled:	1949		
Driller:	MULLIN		
Quad map:	6		
Long83dd:	-156.456388889		
Lat83dd:	20.7705555556		
Gps:	0	Utm:	-1
Owner user:	Alo S	Old number:	220-
Well type:	Not Reported	Casing dia:	8
Ground el:	Not Reported		
Well depth:	19		
Solid case:	18	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	THO		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1949
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001118

**E11**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI8000000001132**

Objectid:	3060	Wid:	6-4627-016
Island:	Maui	Well name:	Tmk 3-9-26-67
Old name:	Not Reported		
Yr drilled:	1969		
Driller:	OCEAN VIEW		
Quad map:	8		
Long83dd:	-156.4475		
Lat83dd:	20.7766666667		
Gps:	0	Utm:	-1
Owner user:	Batoon A	Old number:	228-

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well type:	ROT	Casing dia:	4
Ground el:	Not Reported		
Well depth:	161		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Init head:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1969
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001132

**E12**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000268879**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204648156270101		
Monloc name:	6-4627-16 W228		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7768007
Longitude:	-156.447459	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	140.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19690101	Welldepth:	161
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

**D13**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

Database      EDR ID Number

**HI WELLS      HI8000000001119**

Objectid:	3047	Wid:	6-4627-003
Island:	Maui	Well name:	Trnk 3-9-01-54
Old name:	Not Reported		
Yr drilled:	1947		
Driller:	VENTURA J		
Quad map:	6		
Long83dd:	-156.456666667		
Lat83dd:	20.7711111111		
Gps:	0	Utm:	-1
Owner user:	Ting L	Old number:	230-
Well type:	Not Reported	Casing dia:	10
Ground el:	Not Reported		
Well depth:	29		
Solid case:	26	Perf case:	Not Reported
Use:	Other	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	QD		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Trnk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1947
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001119

**D14**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000268870**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204628156273401		
Monloc name:	6-4627-03 W230		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7712457
Longitude:	-156.4566253	Sourcemap scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	18.00
Vert measure units:	feet	Vertacc measure val:	3
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILocal	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19470101	Welldepth:	29
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**F15**  
**SSW**  
 1/2 - 1 Mile  
 Lower

**FED USGS      USGS40000268867**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204550156272101		
Monloc name:	6-4527-06 W210		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.760691
Longitude:	-156.4530145	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILocal	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19480101	Welldepth:	28
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**E16**  
**North**  
 1/2 - 1 Mile  
 Higher

**HI WELLS      HI8000000001134**

Objectid:	3061	Wid:	6-4627-017
Island:	Maui	Well name:	Trmk 3-9-26-66
Old name:	Not Reported		
Yr drilled:	1969		
Driller:	OCEAN VIEW		
Quad map:	8		
Long83dd:	-156.4475		
Lat83dd:	20.7775		
Gps:	0	Utm:	-1
Owner user:	Tavares H	Old number:	229-

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well type:	ROT	Casing dia:	4
Ground el:	Not Reported		
Well depth:	120		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, not agriculture)	Init head2:	Not Reported
Init head:	Not Reported		
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Trmk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1969
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001134

**F17**  
**SSW**  
 1/2 - 1 Mile  
 Lower

**HI WELLS      HI8000000001109**

Objectid:	3026	Wid:	6-4527-006
Island:	Maui	Well name:	Trmk 3-9-01-9
Old name:	Not Reported		
Yr drilled:	1948		
Driller:	MULLIN		
Quad map:	8		
Long83dd:	-156.453055556		
Lat83dd:	20.7605555556		
Gps:	0	Utm:	-1
Owner user:	Teruya E	Old number:	210-
Well type:	Not Reported	Casing dia:	6
Ground el:	Not Reported		
Well depth:	28		
Solid case:	25	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, not agriculture)	Init head2:	Not Reported
Init head:	Not Reported		
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	42
Test ddown:	Not Reported	Test chlor:	541
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TK		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Trmk:	(2) 3-9-001:009
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1948
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001109

**E18**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000268882**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204651156270101		
Monloc name:	6-4627-17 W229		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.777634
Longitude:	-156.447459	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	140.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19690101	Welldepth:	120
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**19**  
**SW**  
**1/2 - 1 Mile**  
**Lower**

**HI WELLS      HI8000000001111**

Objectid:	3036	Wid:	6-4527-020
Island:	Maui	Well name:	Haleakala Gardens Irrigation
Old name:	Not Reported		
Yr drilled:	2012		
Driller:	Not Reported		
Quad map:	0		
Long83dd:	-156.455236		
Lat83dd:	20.762039		
Gps:	0	Utm:	0
Owner user:	Not Reported	Old number:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well type:	Not Reported	Casing dia:	6
Ground el:	11.41		
Well depth:	60		
Solid case:	35	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, not agriculture)	Init head:	Not Reported
Init head:	2.65	Init head2:	2.65
Init head3:	2.92		
Init ci:	120		
Test date:	9/17/2012	Test gpm:	90
Test ddown:	0.9	Test chlor:	120
Test temp:	73	Test unit:	F
Pump gpm:	90		
Draft mgy:	71	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Qa		
Pump yr:	2012		
Draft yr:	Not Reported	Bot hole:	-48.59
Bot solid:	-23.59	Bot perf:	Not Reported
Spec capac:	100		
Pump mgd:	.13		
Draft mgd:	Not Reported	Pump elev:	-12.59
Pump depth:	24	Tmk:	(2) 3-9-044:041
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	11/08/2012
Pir:	11/8/2012	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001111

**G20  
SSW  
1/2 - 1 Mile  
Lower**

**FED USGS      USGS40000268864**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204544156271101		
Monloc name:	6-4527-08 PIILANI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7590244
Longitude:	-156.4502368	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	35.75
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refs:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19900426	Welldepth:	66
Welldepth units:	ft	Wellholedepth:	66
Wellholedepth units:	ft		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1990-04-26	35.25	

**21**  
**West**  
**1/2 - 1 Mile**  
**Lower**

**HI WELLS      HI8000000001117**

Objectid:	3062	Wid:	6-4627-019
Island:	Maui	Well name:	Maui Lu
Old name:	Not Reported		
Yr drilled:	1956		
Driller:	GIBSON		
Quad map:	8		
Long83dd:	-156.458055556		
Lat83dd:	20.7697222222		
Gps:	0	Utm:	-1
Owner user:	Maui Lu Resort	Old number:	Not Reported
Well type:	DUG	Casing dia:	Not Reported
Ground el:	Not Reported		
Well depth:	0		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Landscape/Water Features	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	600		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(2) 3-9-001:086
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	12/30/1899
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001117

**G22**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**HI WELLS      HI8000000001107**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Objectid:	3028	Wid:	6-4527-008
Island:	Maui	Well name:	Kihei-Piilani
Old name:	Not Reported		
Yr drilled:	1990		
Driller:	DAVID PICO		
Quad map:	8		
Long83dd:	-156.450277778		
Lat83dd:	20.7588888889		
Gps:	0	Utm:	-1
Owner user:	Blackfield Hawaii	Old number:	Not Reported
Well type:	ROT	Casing dia:	10
Ground el:	41		
Well depth:	71		
Solid case:	38	Perf case:	58
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Use year:	Not Reported
Init head:	0.75	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	4/26/1990	Test gpm:	25
Test ddown:	0.3	Test chlor:	420
Test temp:	23.3	Test unit:	C
Pump gpm:	40		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TK		
Pump yr:	1997		
Draft yr:	Not Reported	Bot hole:	-30
Bot solid:	3	Bot perf:	-17
Spec capac:	83		
Pump mgd:	.057		
Draft mgd:	Not Reported	Pump elev:	-9
Pump depth:	50	Trnk:	(2) 2-2-002:042
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	05/01/1990
Pir:	1/16/1997	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001107

**23**  
**SW**  
**1/2 - 1 Mile**  
**Lower**

**HI WELLS      HI8000000001110**

Objectid:	3029	Wid:	6-4527-010
Island:	Maui	Well name:	Kihei-Koa
Old name:	Not Reported		
Yr drilled:	1992		
Driller:	OWNER		
Quad map:	6		
Long83dd:	-156.4575		
Lat83dd:	20.7619444444		
Gps:	0	Utm:	-1
Owner user:	Koa Res Assoc	Old number:	Not Reported
Well type:	DUG	Casing dia:	24
Ground el:	7		
Well depth:	14		
Solid case:	7	Perf case:	12
Use:	IRR - Landscape/Water Features	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	335		
Test date:	8/6/1992	Test gpm:	20
Test ddown:	1.8	Test chlor:	697

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Test temp:	24.4	Test unit:	C
Pump gpm:	30		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	QD		
Pump yr:	1992		
Draft yr:	Not Reported	Bot hole:	-7
Bot solid:	0	Bot perf:	-5
Spec capac:	11		
Pump mgd:	.043		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Trnk:	(2) 3-9-001:134
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	07/24/1992
Pir:	8/8/1992	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001110

**H24  
SSW  
1/2 - 1 Mile  
Lower**

**FED USGS      USGS40000268863**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204540156271701		
Monloc name:	6-4527-07 W207		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7579134
Longitude:	-156.4519034	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19490101	Welldepth:	42
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**I25  
NNW  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS40000268886**



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204657156271301		
Monloc name:	6-4627.CA IWS		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7793005
Longitude:	-156.450792	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	110.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19740917	Welldepth:	30
Welldepth units:	ft	Wellholedepth:	30
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
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1974-09-17

Note: The site was dry (no water level recorded).

**H26**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**HI WELLS      HI8000000001106**

Objectid:	3027	Wid:	6-4527-007
Island:	Maui	Well name:	Tmk 3-9-23-30
Old name:	Not Reported		
Yr drilled:	1949		
Driller:	MULLIN		
Quad map:	8		
Long83dd:	-156.451944444		
Lat83dd:	20.7577777778		
Gps:	0	Utm:	-1
Owner user:	Uyeno H	Old number:	207-
Well type:	Not Reported	Casing dia:	8
Ground el:	Not Reported		
Well depth:	42		
Solid case:	42	Perf case:	Not Reported
Use:	UNU - Unused	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0	Head feet:	Not Reported
Draft mgy:	Not Reported	Min chlor:	Not Reported
Max chlor:	Not Reported		
Geology:	TK	Bot hole:	Not Reported
Pump yr:	0	Bot perf:	Not Reported
Draft yr:	Not Reported		
Bot solid:	Not Reported	Pump elev:	Not Reported
Spec capac:	Not Reported	Trnk:	(2) 3-9-023:030
Pump mgd:	0		
Draft mgd:	Not Reported	Wcr:	01/01/1949
Pump depth:	Not Reported	Surveyor:	Not Reported
Aqui code:	60304	Site id:	HI8000000001106
Latest hd:	Not Reported		
Pir:	Not Reported		
T:	Not Reported		

**I27  
NNW  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS40000268887**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204657156271401		
Monloc name:	6-4627.BA IWS		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7793005
Longitude:	-156.4510699	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	110.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19740916	Welldepth:	23
Welldepth units:	ft	Wellholedepth:	23
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

	Feet below	Feet to
Date	Surface	Sealevel

-----  
1974-09-16

Note: The site was dry (no water level recorded).

**J28  
NW  
1/2 - 1 Mile  
Lower**

**HI WELLS      HI8000000001126**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Objectid:	3056	Wid:	6-4627-012
Island:	Maui	Well name:	Trmk 3-9-15-12
Old name:	Not Reported		
Yr drilled:	1950		
Driller:	MULLIN		
Quad map:	6		
Long83dd:	-156.457777778		
Lat83dd:	20.775		
Gps:	0	Utm:	-1
Owner user:	Fedalizo C	Old number:	235-
Well type:	Not Reported	Casing dia:	8
Ground el:	Not Reported		
Well depth:	31		
Solid case:	31	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Perf case:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	THO		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Trmk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1950
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001126

**J29  
NW  
1/2 - 1 Mile  
Lower**

**FED USGS USGS40000268875**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204642156273801		
Monloc name:	6-4627-12 W235		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7751343
Longitude:	-156.4577364	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	18.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	31
Construction date:	19500101	Wellholedepth:	Not Reported
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**30**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000268878**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204646156273501		
Monloc name:	6-4627-01 W237		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7762453
Longitude:	-156.456903	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23.00
Vert measure units:	feet	Vertacc measure val:	3
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**J31**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

**HI WELLS      HI8000000001128**

Objectid:	3057	Wid:	6-4627-013
Island:	Maui	Well name:	Tmk 3-9-15-14
Old name:	Not Reported		
Yr drilled:	1950		
Driller:	MULLIN		
Quad map:	6		
Long83dd:	-156.457777778		
Lat83dd:	20.775277778		
Gps:	0	Utm:	-1
Owner user:	Bosque J	Old number:	236-
Well type:	Not Reported	Casing dia:	8
Ground el:	20		
Well depth:	29		
Solid case:	20	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Init head2:	Not Reported
Init head:	3.1		
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0	Head feet:	Not Reported
Draft mgy:	Not Reported	Min chlor:	Not Reported
Max chlor:	Not Reported		
Geology:	THO	Bot hole:	-9
Pump yr:	0	Bot perf:	Not Reported
Draft yr:	Not Reported		
Bot solid:	9	Pump elev:	Not Reported
Spec capac:	Not Reported	Tmk:	Not Reported
Pump mgd:	0		
Draft mgd:	Not Reported	Wcr:	01/01/1950
Pump depth:	Not Reported	Surveyor:	Not Reported
Aqui code:	60304	Site id:	HI8000000001128
Latest hd:	Not Reported		
Pir:	Not Reported		
T:	Not Reported		

**J32  
NW  
1/2 - 1 Mile  
Lower**

**FED USGS      USGS40000268877**

Org. Identifier:	USGS-HI	Drainagearea value:	Not Reported
Formal name:	USGS Hawaii Water Science Center	Contrib drainagearea:	Not Reported
Monloc Identifier:	USGS-204643156273801	Latitude:	20.775412
Monloc name:	6-4627-13 W236	Sourcemap scale:	24000
Monloc type:	Well	Horiz Acc measure units:	seconds
Monloc desc:	Not Reported		
Huc code:	20020000	Vert measure val:	20.00
Drainagearea Units:	Not Reported	Vertacc measure val:	2
Contrib drainagearea units:	Not Reported	Countrycode:	US
Longitude:	-156.4577364		
Horiz Acc measure:	1	Welldepth:	29
Horiz Collection method:	Interpolated from map	Wellholedepth:	Not Reported
Horiz coord refsys:	NAD83		
Vert measure units:	feet		
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL		
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19500101		
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**J33  
NW  
1/2 - 1 Mile  
Lower**

**HI WELLS      HI8000000001130**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Objectid:	3045	Wid:	6-4627-001
Island:	Maui	Well name:	Tmk 3-9-01-24
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	6		
Long83dd:	-156.4575		
Lat83dd:	20.7761111111		
Gps:	0	Utm:	-1
Owner user:	Uehara T	Old number:	237-
Well type:	Not Reported	Casing dia:	Not Reported
Ground el:	Not Reported		
Well depth:	0		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	Other	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	THO		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	12/30/1899
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001130

**34**  
**NNW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000268888**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204657156272401		
Monloc name:	6-4627.AA IWS		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7793005
Longitude:	-156.4538476	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	58.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	28
Construction date:	19730720	Wellholedepth:	28
Welldepth units:	ft		
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
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1973-07-20

Note: The site was dry (no water level recorded).

**K35**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

FED USGS      USGS40000268861

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204533156271701		
Monloc name:	6-4527.AA IWS		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7559691
Longitude:	-156.4519034	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	19.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19741109	Welldepth:	60
Welldepth units:	ft	Wellholedepth:	60
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

**36**  
**SW**  
**1/2 - 1 Mile**  
**Lower**

HI WELLS      HI800000001108

Objectid:	3031	Wid:	6-4527-014
Island:	Maui	Well name:	Kauhale Makai
Old name:	Not Reported		
Yr drilled:	2001		
Driller:	WAILANI DRLG		
Quad map:	6		
Long83dd:	-156.458333333		
Lat83dd:	20.7597222222		
Gps:	0	Utm:	-1
Owner user:	Kauhale Makai	Old number:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well type:	ROT	Casing dia:	6
Ground el:	9		
Well depth:	86		
Solid case:	57	Perf case:	Not Reported
Use:	IRR - Parks	Use year:	Not Reported
Init head:	1.69	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	2518		
Test date:	3/7/2001	Test gpm:	100
Test ddown:	5.77	Test chlor:	2897
Test temp:	74	Test unit:	F
Pump gpm:	150		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	2001		
Draft yr:	Not Reported	Bot hole:	-77
Bot solid:	-48	Bot perf:	Not Reported
Spec capac:	17		
Pump mgd:	.216		
Draft mgd:	Not Reported	Pump elev:	-15
Pump depth:	24	Tmk:	(2) 3-9-001:075
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	12/30/1899
Pir:	Not Reported	Surveyor:	KIRK T TANAKA
T:	4552	Site id:	HI8000000001108

**L37  
NW  
1/2 - 1 Mile  
Lower**

**HI WELLS      HI8000000001135**

Objectid:	3053	Wid:	6-4627-009
Island:	Maui	Well name:	Tmk 3-9-01-50
Old name:	Not Reported		
Yr drilled:	1948		
Driller:	MULLIN		
Quad map:	6		
Long83dd:	-156.458611111		
Lat83dd:	20.7780555556		
Gps:	0	Utm:	-1
Owner user:	Gusukuma T	Old number:	238-
Well type:	Not Reported	Casing dia:	4
Ground el:	Not Reported		
Well depth:	35		
Solid case:	35	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	THO		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Trmk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1948
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001135

**K38**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000268860**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204529156271601		
Monloc name:	6-4527-01 W200		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7548581
Longitude:	-156.4516257	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	18.00
Vert measure units:	feet	Vertacc measure val:	3
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19450101	Welldepth:	30
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**L39**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000268883**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204653156274101		
Monloc name:	6-4627-09 W238		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7781896
Longitude:	-156.4585696	Sourcemap scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19480101	Welldepth:	35
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**K40**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**HI WELLS      HI8000000001104**

Objectid:	3021	Wid:	6-4527-001
Island:	Maui	Well name:	TMK 3-9-02-36
Old name:	Not Reported		
Yr drilled:	1945		
Driller:	MULLIN		
Quad map:	8		
Long83dd:	-156.451666667		
Lat83dd:	20.7547222222		
Gps:	0	Utm:	-1
Owner user:	Akina R	Old number:	200-
Well type:	Not Reported	Casing dia:	6
Ground el:	Not Reported		
Well depth:	30		
Solid case:	22	Perf case:	Not Reported
Use:	AGR - Crops and Processing	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	250
Test ddown:	2	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	120		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TK		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	125		
Pump mgd:	.17		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(2) 3-9-002:036
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1945
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001104

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

**M41**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

Database      EDR ID Number

**HI WELLS      HI8000000001131**

Objectid:	3054	Wid:	6-4627-010
Island:	Maui	Well name:	Trnk 3-9-06-06
Old name:	Not Reported		
Yr drilled:	1948		
Driller:	MULLIN		
Quad map:	6		
Long83dd:	-156.460277778		
Lat83dd:	20.7766666667		
Gps:	0	Utm:	-1
Owner user:	Fujimoto I	Old number:	239-
Well type:	Not Reported	Casing dia:	7
Ground el:	Not Reported		
Well depth:	19		
Solid case:	19	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Perf dia:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	THO		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Trnk:	Not Reported
Aqui code:	60304		
Latest hd:	Not Reported	Wcr:	01/01/1948
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000001131

**M42**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000268880**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-204648156274701		
Monloc name:	6-4627-10 W239		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20020000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	20.7768008
Longitude:	-156.4602363	Sourcemap scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	10.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refs:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19480101	Welldepth:	19
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

Federal EPA Radon Zone for MAUI County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for Zip Code: 96753

Number of sites tested: 10

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.010 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>®</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)  
Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

Well Index Database

Source: Commission on Water Resource Management

Telephone: 808-587-0214

CWRM maintains a Well Index Database to track specific information pertaining to the construction and installation of production wells in Hawaii

## OTHER STATE DATABASE INFORMATION

### RADON

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### STREET AND ADDRESS INFORMATION

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**Piilani Promenade**

Piilani Highway and Kaonoulu Street  
Kihei, HI 96753

Inquiry Number: 3679434.3

July 29, 2013

**Certified Sanborn® Map Report**

# Certified Sanborn® Map Report

7/29/13

**Site Name:**

Piilani Promenade  
Piilani Highway and Kaonoulu  
Kihei, HI 96753

**Client Name:**

MEV, LLC  
P.O. Box 880487  
Pukalani, HI 96788



EDR® Environmental Data Resources Inc

EDR Inquiry # 3679434.3

Contact: Amy Mathis

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by MEV, LLC were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn) and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

## Certified Sanborn Results:

**Site Name:** Piilani Promenade  
**Address:** Piilani Highway and Kaonoulu Street  
**City, State, Zip:** Kihei, HI 96753  
**Cross Street:**  
**P.O. #** 1307-0292  
**Project:** Piilani Promenade  
**Certification #** 72AB-40AE-9149



Sanborn® Library search results  
Certification # 72AB-40AE-9149

## UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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# MALAMA Environmental

July 18, 2013

State of Hawaii Department of Health  
Environmental Management Division  
919 Ala Moana Boulevard, Room 308  
Honolulu, HI 96814  
**Attn: Safe Drinking Water Branch**

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

## SITE INFORMATION:

MEV Project Number: **1307-0292**

Tax Map Key No.: (2) 2-2-2: 16 (portion) (2) 2-2-2: 77  
(2) 2-2-2: 82 (portion) (2) 3-9-1: 34 (portion)  
(2) 3-9-1: 16, 169, 170, 171, 172

Address: **East of Piilani Highway, east of Ka'ono'ulu Street and south of Ohukai Road Kihei, HI 96753**

Current Owners: (2) 2-2-2: 16 (portion) **Haleakala Ranch Company**  
(2) 2-2-2: 77 & 82 (portion) **Kaonoulu Ranch**  
(2) 3-9-1: 34 (portion) **Harry H. Hashimoto Trust**  
(2) 3-9-1: 170, 171, 172 **Piilani Promenade South**  
(2) 3-9-1: 16 **Piilani Promenade North**  
(2) 3-9-1: 169 **Honua'ula Partners LLC**

Former Owner: **Unknown**

Current Occupant: **Unoccupied**

Type of Business: **Vacant land**

Tax Map Keys are enclosed.

Sincerely,

Jeffrey R. King

>Jeffrey

>

>Regarding MEV Project Number 1307-0292, there are no UIC records  
>associated with any of the 9 properties.

>

>Norris Uehara

>

>Supervisor, Groundwater Pollution Control Section

>

>Safe Drinking Water Branch

>

>808 586-4258





# MALAMA Environmental

July 18, 2013

State of Hawaii Department of Health  
Environmental Management Division  
919 Ala Moana Boulevard, Room 309  
Honolulu, HI 96814  
**Attn: Clean Air Branch**

**Subject: REQUEST FOR PUBLIC RECORDS**

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

**SITE INFORMATION:**

MEV Project Number: **1307-0292**

Tax Map Key No.: (2) 2-2-2: 16 (portion) (2) 2-2-2: 77  
(2) 2-2-2: 82 (portion) (2) 3-9-1: 34 (portion)  
(2) 3-9-1: 16,169, 170, 171, 172

Address: **East of Piilani Highway, east of Ka'ono'ulu Street and south of Ohukai Road Kihei, HI 96753**

Current Owners: (2) 2-2-2: 16 (portion) **Haleakala Ranch Company**  
(2) 2-2-2: 77 & 82 (portion) **Kaonoulu Ranch**  
(2) 3-9-1: 34 (portion) **Harry H. Hashimoto Trust**  
(2) 3-9-1: 170, 171, 172 **Piilani Promenade South**  
(2) 3-9-1: 16 **Piilani Promenade North**  
(2) 3-9-1: 169 **Honua'ula Partners LLC**

Former Owner: **Unknown**

Current Occupant: **Unoccupied**

Type of Business: **Vacant land**

Tax Map Keys are enclosed.

Sincerely,

Jeffrey R. King



# MALAMA Environmental

July 18, 2013

State of Hawaii Department of Health  
Environmental Management Division  
919 Ala Moana Boulevard, Room 301  
Honolulu, HI 96814  
**Attn: Clean Water Branch**

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

## SITE INFORMATION:

MEV Project Number: **1307-0292**

Tax Map Key No.: (2) 2-2-2: 16 (portion) (2) 2-2-2: 77  
(2) 2-2-2: 82 (portion) (2) 3-9-1: 34 (portion)  
(2) 3-9-1: 16,169, 170, 171, 172

Address: **East of Piilani Highway, east of Ka'ono'ulu Street and south of Ohukai Road Kihei, HI 96753**

Current Owners: (2) 2-2-2: 16 (portion) **Haleakala Ranch Company**  
(2) 2-2-2: 77 & 82 (portion) **Kaonoulu Ranch**  
(2) 3-9-1: 34 (portion) **Harry H. Hashimoto Trust**  
(2) 3-9-1: 170, 171, 172 **Piilani Promenade South**  
(2) 3-9-1: 16 **Piilani Promenade North**  
(2) 3-9-1: 169 **Honua'ula Partners LLC**

Former Owner: **Unknown**

Current Occupant: **Unoccupied**

Type of Business: **Vacant land**

Tax Map Keys are enclosed.

Sincerely,

Jeffrey R. King







# MALAMA Environmental

July 18, 2013

State of Hawaii Department of Health  
Environmental Management Division  
919 Ala Moana Boulevard, Room 212  
Honolulu, HI 96814  
**Attn: Solid & Hazardous Waste Branch**

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

## SITE INFORMATION:

MEV Project Number: **1307-0292**

Tax Map Key No.: (2) 2-2-2: 16 (portion) (2) 2-2-2: 77  
(2) 2-2-2: 82 (portion) (2) 3-9-1: 34 (portion)  
(2) 3-9-1: 16,169, 170, 171, 172

Address: **East of Piilani Highway, east of Ka'ono'ulu Street and south of Ohukai Road Kihei, HI 96753**

Current Owners: (2) 2-2-2: 16 (portion) **Haleakala Ranch Company**  
(2) 2-2-2: 77 & 82 (portion) **Kaonoulu Ranch**  
(2) 3-9-1: 34 (portion) **Harry H. Hashimoto Trust**  
(2) 3-9-1: 170, 171, 172 **Piilani Promenade South**  
(2) 3-9-1: 16 **Piilani Promenade North**  
(2) 3-9-1: 169 **Honua'ula Partners LLC**

Former Owner: **Unknown**

Current Occupant: **Unoccupied**

Type of Business: **Vacant land**

Tax Map Keys are enclosed.

Sincerely,

Jeffrey R. King



# MALAMA Environmental

July 18, 2013

Maui County Fire Department  
Hazardous Materials Division  
200 Dairy Road  
Kahului, Hawaii 96732  
Attn: Acting Officer

**RE: Request for Public Records**

Dear Sir/Madam:

MEV is requesting any past or present information of environmental concern pertaining to the subject site and adjacent sites from the Maui County Fire Department's database. This could include information on environmental releases (spills), permits, citations, inspections, fires, etc.

***SITE INFORMATION:***

MEV Project Number:	<b>1307-0292</b>	
Tax Map Key No.:	(2) 2-2-2: 16 (portion)	(2) 2-2-2: 77
	(2) 2-2-2: 82 (portion)	(2) 3-9-1: 34 (portion)
	(2) 3-9-1: 16,169, 170, 171, 172	
Address:	<b>East of Piilani Highway, east of Ka'ono'ulu Street and south of Ohukai Road Kihei, HI 96753</b>	
Current Owners:	(2) 2-2-2: 16 (portion)	<b>Haleakala Ranch Company</b>
	(2) 2-2-2: 77 & 82 (portion)	<b>Kaonoulu Ranch</b>
	(2) 3-9-1: 34 (portion)	<b>Harry H. Hashimoto Trust</b>
	(2) 3-9-1: 170, 171, 172	<b>Piilani Promenade South</b>
	(2) 3-9-1: 16	<b>Piilani Promenade North</b>
	(2) 3-9-1: 169	<b>Honua'ula Partners LLC</b>
Former Owner:	<b>Unknown</b>	
Current Occupant:	<b>Unoccupied</b>	
Type of Business:	<b>Vacant land</b>	

Thank you for your assistance.

Sincerely yours,

Jeffrey R. King

NEIL ABERCROMBIE  
GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 3378  
HONOLULU, HI 96801-3378

In reply, please refer to:  
DOH/CWB

R10D273.EXT.12

October 15, 2012

Mr. Douglas Gray  
President  
Piilani Promenade South LLC  
178022 Sky Park Circle #200  
Irvine, California 92614

Dear Mr. Gray:

**Subject: Administrative Extension of  
Notice of General Permit Coverage (NGPC)  
Kaonoulu Market Place / Piilani Promenade  
Kihei, Island of Maui, Hawaii  
File No. HI R10D273**

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your renewal Notice of Intent (NOI) and \$500 filing fee for coverage under the National Pollutant Discharge Elimination System general permit provisions, in accordance with the Hawaii Administrative Rules (HAR), Section 11-55-34.08.

The DOH is unable to complete the processing of your NOI prior to the current NGPC expiration date. Therefore, in accordance with HAR, Section 11-55-34.09(d), the DOH hereby administratively extends the subject NGPC until a notice of renewed coverage under the applicable general permit is issued or until notified by the DOH, whichever occurs first. Please note that the DOH may request you submit additional information in order to complete the processing of your NOI for renewed coverage.

The Permittee shall not be held in violation of Hawaii Revised Statutes, Chapter 342D-6(h), and HAR, Chapter 11-55, during the pendency of its renewal NOI, so long as it acts consistently with the NGPC presently granted. **Note: The Permittee shall continue any sampling required by the current NGPC.** Any non-compliance with the conditions of the administratively extended NGPC may be subject to penalties of up to \$25,000 per violation per day.

It is the Permittee's responsibility to ensure that anyone working under this administrative extension of your NGPC understands and complies with the terms and conditions therein.

Mr. Douglas Gray  
October 15, 2012  
Page 2

R10D273.EXT.12

If you have any questions, please contact Ms. Kris Poentis of the Engineering Section, CWB, at (808) 586-4309.

Sincerely,



STUART YAMADA, P.E., CHIEF  
Environmental Management Division

Enclosure: Receipt No. 41339 for \$500 Filing Fee

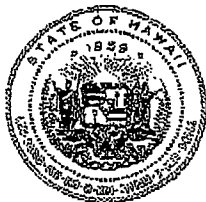
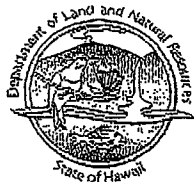
- c: Mr. Douglas Gray, Piilani Promenade South LLC (w/o encl.)  
[via e-mail [dgray@eclipsedevelopmentgroup.com](mailto:dgray@eclipsedevelopmentgroup.com)]  
Mr. Charles Jenks, Piilani Promenade South LLC (w/o encl.)  
[via e-mail [charliej@pacificrimland.com](mailto:charliej@pacificrimland.com)]  
Mr. Derek Ono, Warren S. Unemori Engineering (w/o encl.) [via e-mail [dono@wsui.com](mailto:dono@wsui.com)]

Amy, attached find the questionnaire you requested. The following addresses your questions:

1. Could you please tell me what the intended use is for the property? Will some of it be residential?  
At the present time there is a residential component of 200 rental units proposed for the project.
2. When I was walking around the baseyard, I noted 2 metal storage containers that were locked. Can you tell me what is inside of the containers?  
General construction materials associated with the material already purchased and stored on site such as valves, fasteners, etc.
3. Are there any petroleum projects within the baseyard that you are aware of?  
Not at present
4. Has there been a recent archaeological inspection conducted on the premises? If so, can I take a look at it?  
Yes, the AIS was done in the early 90's and I have attached to this email.

CJ

LINDA LINGLE  
GOVERNOR OF HAWAII



PETER T. YOUNG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

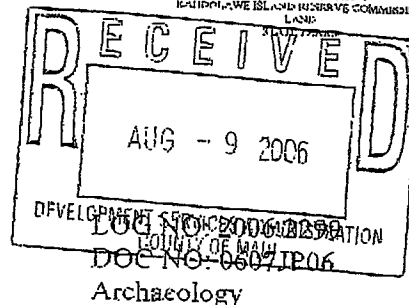
ROBERT K. MASUDA  
DEPUTY DIRECTOR - LAND

DEAN NAKANO  
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
HAWAIIAN ISLAND RESERVE COMMISSION  
LAND

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION  
601 KAMOKILA BOULEVARD, ROOM 555  
KAPOLEI, HAWAII 96707



July 21, 2006

Mr. Bert Ratte  
Department of Public Works and Environmental Management  
Development Services Administration, County of Maui  
250 South High Street,  
Wailuku Hawai'i 96793

Dear Mr. Ratte:

**SUBJECT: Chapter 6E-42 Historic Preservation Review [County/DSA] -  
Construction Plan Review and Drainage Report (File No: 2.2795) for the  
Proposed Ka'onu'ulu Marketplace AKA Ka'onu'ulu Ranch Large Lot  
Subdivision  
Ka'onu'ulu Ahupua'a, Wailuku District, Island of Maui  
TMK: (2) 2-2-002:015 & 3-9-001:016**

The proposed undertaking involves Lot 2 of Ka'onu'ulu Ranch (Large-Lot) Subdivision. Proposed plans involve the development of approximately eighty-eight (88) acres that includes a commercial center consisting of four (4) light industrial lots numbered 1 through 4. Development will include asphalt paved roadways, concrete curbing and gutters, concrete sidewalks, and landscaping. Utility improvements will consist of underground sewer, drainage, water, and electrical and telephone distribution center.

We have previously provided comments involving the subject parcel (LOG NO: 2004.3636/ DOC NO: 0412CD19; LOG NO: 2004.1249/ DOC NO: 0404CD42). We commented on the preliminary plat review that summarized the status of the subject parcel (LOG NO: 2003.2065/ DOC NO: 0310CD33). In 1994, Xamanek Researches conducted an archaeological inventory survey and documented twenty-one (21) historic sites that were issued twenty (20) State Inventory of Historic Places (SIHP) numbers 50-50-10-3727 through -3746. Of these sites, nineteen (19) were deemed significant for information content and have had sufficient data collected therefore no further archaeological work is necessary. One (1) site (petroglyph) was removed from the original location and slated for permanent preservation at a different location [TMK: (2) 2-2-006:009]. The present location of the petroglyph is specified in the preservation plan (after-the-fact) that was submitted by Xamanek for Munekiyo and Arakawa in 1994 (LOG NO: 1998.21157/ DOC NO: 9802BD21).

At the time of the preliminary plat review, we requested that no action be taken of the subdivision until we have received a site plan with the original and permanent locations of SIHP 50-50-10-3746

Mr. Bert Ratte  
Page 2

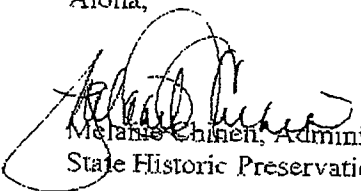
clearly demarcated by a licensed surveyor (LOG NO: 2003.2065/ DOC NO: 0310CD33). Our records indicate that we have not yet received a location map for the petroglyph.

We concur that **no historic properties will be affected** by this undertaking because:

- Intensive cultivation has altered the land
- Residential development/urbanization has altered the land
- Previous grubbing/grading has altered the land
- An accepted archaeological inventory survey (AIS) found no historic properties
- SHPD previously reviewed this project and mitigation has been completed
- Other: *We have previously investigated the subject property and documented twenty (20) historic archaeological sites. SIHP 50-50-10-3746 (petroglyph) was slated for permanent preservation and has an accepted preservation plan. It is unlikely that any historic properties will be affected by the proposed undertaking considering the specifics of the preservation plan are implemented.*

In the event that historic resources, including human skeletal remains, are identified during routine construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Division, Maui Section, needs to be contacted immediately at (808) 243-5169.

Aloha,

  
Melanie Chinen, Administrator  
State Historic Preservation Division

JP:kf:gvf

c: Michael Foley, Director, Department of Planning, FAX 808-270-7634  
Maui Cultural Resources Commission, Dept. of Planning, 250 S. High St., Wailuku, HI 96793

# **Appendix C:**

## **Qualifications of Environmental Professionals**





# MALAMA Environmental

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## STATEMENT OF QUALIFICATIONS

for

*Amy Mathis, Environmental Scientist*

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***Company Position***

Environmental Scientist (Geologist)

***Responsibilities and Duties:***

- Project Coordinator on Phase I & II Environmental Site Assessments/Investigations
- Project Coordinator on Phase III Remediation Projects
- Assist on Underground Storage Tank (UST) Closures
- Asbestos Inspections and Sampling
- Assist on Lead-Based Paint Inspections
- Indoor Air Quality Investigations and Sampling
- Erosion Control Plan (BMP) Development
- QA/QC Officer for Sampling Projects

***Experience:***

- Soil Investigations/Remediation
- UST Removal and Closure
- Hazardous Materials Management
- Asbestos and Lead-Based Paint Projects (Inspections & Sampling)
- Air Quality Sampling for Particulate and Microbiological Contaminants
- Wetland Delineations
- Environmental Report Writing and Compilation
- Ornithological counts/data collections
- Entomological counts/data collections
- Chemical technician specializing in wet chemical methods, analytical instrumentation and sample preparation.
- Geological mapping
- Vegetation mapping

***Training & Education***

- Bachelor of Science, Geology with Environmental Science Option  
New Mexico Institute of Mining and Technology, 1996-1999.
- Bachelor of Fine Arts, Music with minors in Fine Art and Theater  
Kutztown University Pennsylvania 1991-1995.
- Registered Environmental Assessor I REA I - 30347
- 40-hr OSHA HAZWOPER Course
- AHERA Asbestos Building Inspector HIASB-3044
- Asbestos Air Quality Project Monitor
- Asbestos Contract Supervisor
- Lead-Based Paint Inspector PB-0446



# MALAMA Environmental

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## STATEMENT OF QUALIFICATIONS

for

*Jeffrey R. King, Manager-Technical Services*

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***Company Position:*** Manager – Technical Services

***Responsibilities and Duties:***

- Phase I & II Environmental Site Assessments/Investigations
- Soil and Groundwater Investigation and Remediation Projects
- Underground Storage Tank (UST) Projects
- Asbestos, Lead-Based Paint, Hazardous Materials Inspections and Sampling
- Storm Water and Indoor Air Quality Investigations and Sampling
- Waste Management and Regulatory Compliance Projects
- Proposals, Contracts, Marketing

***Experience:***

- Soil and Groundwater Investigations/Remediation
- UST Investigations, Removal, and Closure
- Subsurface Investigations with Various Drill Rig Technologies
- Environmental Site Assessments, Property Condition Assessments
- Environmental Report Writing, Review, and Authorization
- Environmental Health and Safety
- Regulatory Compliance/Permitting
- Emergency Response

***Training & Education:***

- Bachelor of Science, Geology, University of California, Los Angeles, 1979
- Graduate Courses in Hazardous Materials Management, Wayne State University, Detroit, Michigan, 1988-89
- 40-hr OSHA HAZWOPER Course and current 8-hour refresher
- Certified Hazardous Materials Manager (CHMM) Overview Course, CHMM-Michigan
- Michigan Risk-Based Corrective Action (RBCA) Course
- Licensed Professional Geologist #1795, Indiana
- Certified Asbestos Inspector #HIASB-3545, Hawaii
- Certified Lead Risk Assessor #PB-0663, Hawaii

# **Appendix D:**

## **Acronyms and Abbreviations**

Abbreviation	Definition
AST	Aboveground Storage Tank
AHERA	(Federal) Asbestos Hazard Emergency Response Act
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BLM	Bureau of Land Management
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CAA	Clean Air Act: Regulates Air Quality
CAMU	Corrective Action management Unit
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act: Federal Superfund for Cleanup of Environmental Contamination (1980, 1986)
CERCLIS	CERCLA Information System (data base)
CESQG	Conditionally Exempt SQG: Hazardous Waste Generator less than 100 kg/mo.
C.F.R.	Code of Federal Regulations: National Standard Regulations
COLIWASA	Composite Liquid Waste Sampler
CRC	Chlorofluorocarbon
CMU	Concrete Masonry Unit
CWA	Clean Water Act: Regulates Water Quality (1972, 1987)
CZMA	Coastal Zone Management Act
DLNR	Department of Land and Natural Resources
DOT	Department of Transportation: Administers hazardous Waste Containers-Marking-Labeling-Placarding and Transportation Procedures.
DOH	Department Of Health (State Of Hawaii)
DRASTIC	EPA Standardized System for Evaluating Groundwater Pollution Potential Using Hydrogeologic Settings.
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency: Administers CERCLA, RCRA and SARA
FID	Flame Ionization Detector
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act: Regulates Pesticides (1972, 1988)
FSP	Field Sampling Plan
FWPCA	Federal Water Pollution Control Act
HAP	Hazardous Air Pollutant
HCS	(OSHA) Hazard Communication Standard
HSWA	(Federal) Hazardous and Solid Waste Amendments of 1984
LEL	Lower Explosive Limit
LQG	Large Quantity Generators; Hazardous Waste Generator in Excess of 100 kg/mo.
LUST	Leaking Underground Storage Tank.
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MSDS	Material Safety Data Sheets: Hazard Information Required for Chemical Substances by OSHA
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants (Under CAA Regulations)
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
O&M	Operating and Maintenance
OCS	Outer Continental Shelf
OSHA	Occupational Safety and Health Act: Established Hazard Communication Program and Employee Right-to-Know Law (1970)
OVA	Organic Vapor Analyzer
PCB	Polychlorinated Biphenyls: Toxic Substance Used in Electric-Device Cooling.
PCi/l	Picocuries Per Liter
PEL	Permissible Airborne Exposure Level
PID	Photoionization Detector
POTW	Publicly Owned Treatment Works

<b>ppb</b>	parts per billion
<b>ppm</b>	parts per million
<b>PWP</b>	Project Work Plan
<b>PRPs</b>	Potentially Responsible Parties
<b>QA/QC</b>	Quality Assurance/Quality Control
<b>QAPP</b>	Quality Assurance Project Plan
<b>RBCA</b>	Risk Based Corrective Action and Decision-Making at Sites with Contaminated Soil and Groundwater. (Hawaii DOH)
<b>RCRA</b>	Resource Conservation and Recovery Act: Federal Hazardous Waste Management Law. Regulates Waste Generation, Transportation, Treatment, Storage or Disposal Sites (1976, 1984)
<b>RQ</b>	Reportable Quantity
<b>RUST</b>	Registry of Underground Storage Tanks
<b>SAP</b>	Sampling & Analysis Plan
<b>SARA</b>	Superfund Amendments and Reauthorization Act: Amends CERCLA and includes Community Right to Know Law. Requires facilities report their chemical inventories and emissions (1986).
<b>SDWA</b>	Safe Drinking Water Act: Establishes maximum contaminant levels for drinking water (1974, 1986).
<b>SHSP</b>	Site Health & Safety Plan
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State implementation plan
<b>SPCC</b>	Spill Prevention Control and Countermeasure
<b>SQG</b>	Small Quantity Generator: Hazardous Waste Generator between 100-1000 kg/mo.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure: A toxicity test for certain substances declared hazardous by the EPA.
<b>TMK</b>	(Hawaii ) Tax Map Key
<b>TPH</b>	Total Petroleum Hydrocarbons
<b>TPQ</b>	Threshold Planning Quantity
<b>TSCA</b>	Toxic Substances Control Act: Regulates PCBs in electrical devices and chromium in evaporative cooling towers, asbestos in schools. (1976)
<b>TSD</b>	Treatment, Storage, and Disposal
<b>UEL</b>	Upper Explosive Limit
<b>UIC</b>	Underground Injection Control
<b>USGS</b>	United States Geological Survey
<b>UST</b>	Underground Storage Tank
<b>VOA</b>	Volatile Organic Analyses
<b>VOC</b>	Volatile Organic Compound: EPA listed toxic or carcinogenic organic substances.
<b>Minimal, Minor or Not Significant</b>	1) An unlikely or remote event, i.e., possible, but not anticipated under current conditions and observed features. 2) Insignificant when compared to regulatory acceptance levels, guideline action levels or when compared to background and/or baseline conditions of the local environment. 3) Any potential effect or impact attributed to the subject factor may be considered as the least likely source among a number of potentially responsible factors. 4) Any potential effect may not be measurable or detected by current technology. 5) Education, experience, and background of the investigator were utilized to conclude the situation or condition as trifle.