The Honorable Gilbert S. Coloma-Agaran
Chairman of the Board
Attn: Linnel Nishioka, Deputy Director
Department of Land & Natural Resources
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Coloma-Agaran:

SUBJECT: PROPOSED SOURCE OF POTABLE WATER

Enclosed for your review and comments is a copy of the preliminary engineering report for the following source:

Kealia Wells 1A & 2A
State Well No. 2-0618-09 & 10
Kealia, Kauai

This report has been prepared pursuant to Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems, Section 11-20-29.

Please review the report as to the possible impacts that may result of the use of these wells. These two wells will be replacing the existing Kealia Wells 1 & 2, due to the deterioration of the physical conditions.

Please submit any comments to the Safe Drinking Water Branch within 30 days from the date of this letter. If we do not hear from your office, we will assume that there were no comments to this project. If you should have any questions, please call William Wong of the Safe Drinking Water Branch at 586-4258.

Sincerely,

THOMAS E. ARIZUMI, P.E., CHIEF
Environmental Management Division

WW:la

Enclosure
PRELIMINARY ENGINEERING REPORT
FOR NEW POTABLE WATER SOURCES
KEALIA WELLS 1A & 2A (0618-09 & 10)
Kealia, Kauai, Hawaii

Prepared for:
Kealia Mauka Holdings, LLC
  c/o Ms. Lorna Nishimitsu
  Law Offices of Walton Hong
  3135A Akahi St.
  Lihue, HI 96766

Prepared by:
Water Resource Associates
1188 Bishop Street, Suite 1708
Honolulu, Hawaii 96813

June 2001
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B WATER QUALITY ANALYSIS
PRELIMINARY ENGINEERING REPORT
FOR NEW POTABLE WATER SOURCES
KEALIA WELLS 1A & 2A (0618-09 & 10)
KEALIA, KAUAI, HAWAII

I. INTRODUCTION

This Preliminary Engineering Report for the Kealia Wells 1A & 2A (State Well Nos. 0618-09 & 10) has been prepared pursuant to the State of Hawaii Department of Health (DOH) Public Health Regulation, Chapter 20 of Title 11, Administrative Rules, "Potable Water Systems", and in accordance with DOH's "Guidelines for Preparation of Preliminary Engineering Reports for New Potable Water Sources, dated January 2, 1996".

The water from the Kealia Wells 1A & 2A will be used to meet average and maximum day consumption for seventy (70) existing residences and twenty-nine (29) new units at Kealia Plantation. The project involves the construction of two 67,000 gallon steel tanks and the installation of a 650 gallon per minute (gpm) submersible pump in each well, pump controls, connecting pipelines, sodium hypochlorite system, and related electrical work.

Kealia Wells 1A & 2A will replace Kealia Wells 1 & 2 (Well Nos. 0618-02 & 01) as part of an overall system upgrade. The original Kealia Wells 1 & 2 were drilled in 1898 by Lihue Plantation to supply Kealia Village.

II. GENERAL INFORMATION

A. PROJECT DESCRIPTION

The Kealia Wells 1A & 2A (State Well Nos. 0618-09 & 10) were completed in January, 2001 and are located on agricultural-zoned land owned by Kealia Mauka Holdings, LLC (TMK 4-7-003:002) at Kealia, Kauai (see Exhibits 1, 2, and 3). The ground elevation at the well site is approximately 10 feet mean sea level (msl). The wells are being developed as part of an overall system upgrade. One well will serve as the primary water source and the second well is being developed for standby purposes. The project involves the installation of a 650 gallon per minute submersible pump in each well, pump controls, connecting pipeline, sodium hypochlorite system, and related electrical work. The well water will be boosted and stored in two new parallel-connected 67,000 gallon steel tanks at elevation 204 feet to be constructed offsite as part of this project.

B. OWNER AND OPERATOR OF THE PROJECT

The well and tank sites are owned by Kealia Mauka Holdings, LLC.
Improvements to the Kealia water system are being done by Goodfellow Bros., Inc. Upon completion of the work, Kealia Mauka Holdings, LLC will be the owner and operator of the new water system.

C. SITE PLAN

The site plan with existing contours is shown in Exhibit 4. Besides the two new wells and pumps, the site will include a small pump control/chlorination building. The 6-foot high chain-link fence and gate will in part be relocated. The site plan also shows the two existing wells, Kealia Wells 1 & 2 (Well Nos. 0618-01 & 02). The two existing wells will be properly abandoned and sealed once the new wells are put into production.

III. PHYSICAL AND HYDROLOGICAL CHARACTERISTICS OF THE AREA

A. LOCATION

The project well and tank sites are located in the ahupua’a of Kealia, which is located in the northeastern part of Kauai, approximately 2 miles north of Kapa’a. The parcel is identified by Tax Map Key 4-7-003:002 (Exhibit 3) and encompasses approximately 926 acres of land.

B. CLIMATE

The climate in the area is generally warm and sunny with prevailing northeasterly tradewinds. Mean annual rainfall at the well site is about 50 inches. Rainfall and groundwater recharge are highest in the permeable mountainous areas to the west, which receive up to 125 inches on an average annual basis. Temperatures range from approximately 65 to 85 degrees F, with an average of about 75 degrees F.

C. TOPOGRAPHY

The Kealia ahupua’a is a 1½-mile wide parcel of land that stretches seven miles from the rugged Makaleha Mountains, 3,000 feet above sea level to the gentle coastal plains and shores of northeast Kauai. The western half of the property is dominated by a rugged mountainous topography carved out of thin-bedded, permeable basaltic lava flows (Waimea Basalts, Napali formation) that formed the original broad, shield-shaped slopes and core of the island and which represent the oldest rocks in the area. The mountainous slopes of Waimea Basalts in the Kealia area are surrounded by much younger basaltic lava flows (Koloa formation) which filled pre-existing drainage basins and stream valleys and formed more gentle and lower-lying slopes that extend to the coast. Erosion has carved three major streams in the region: Kealia Stream which drains much of the interior slopes of the property and empties into Kapaa Stream; Kapaa Stream which lies near and partly along the southern property boundary; and Anahola Stream which drains the area north of the property boundary.
The terrain in the immediate vicinity of the project site is relatively flat, sloping gently to the northwest at a slope of about 4 percent. The prepared ground surface at the well site has an elevation of approximately 10 feet msl.

D. GEOLOGY AND FOUNDATION CONDITIONS

Although the Kealia Wells 1A & 2A are located within younger noncalcareous sediments, composed of the unconsolidated alluvium found along stream valleys and coastal plains, the basal artesian aquifer tapped by the wells is entirely within the Koloa basalts. Core data from the wells indicate the basalts are deeply weathered to a depth of approximately 95 feet.

The geologic log for Kilauea Well 1A is summarized below:

<table>
<thead>
<tr>
<th>Depth Interval, ft</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1-4</td>
<td>Topsoil</td>
</tr>
<tr>
<td>4-7</td>
<td>Brown clay</td>
</tr>
<tr>
<td>7-17</td>
<td>Sand and marine deposits</td>
</tr>
<tr>
<td>17-23</td>
<td>Very hard blue rock</td>
</tr>
<tr>
<td>23-50</td>
<td>Red/brown clay</td>
</tr>
<tr>
<td>50-92</td>
<td>Red/brown clay with sand and cinders</td>
</tr>
<tr>
<td>92-103</td>
<td>Blue rock</td>
</tr>
<tr>
<td>103-134</td>
<td>Broken rock, cinders, and sand</td>
</tr>
<tr>
<td>134-151</td>
<td>Puka rock, coral streaks (water zone)</td>
</tr>
<tr>
<td>151-164</td>
<td>Blue rock</td>
</tr>
<tr>
<td>164-188</td>
<td>Puka rock (water zone)</td>
</tr>
<tr>
<td>188-195</td>
<td>Blue rock</td>
</tr>
</tbody>
</table>

The geologic log for Kilauea Well 2A is summarized below:

<table>
<thead>
<tr>
<th>Depth Interval, ft</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>Topsoil</td>
</tr>
<tr>
<td>4-8</td>
<td>Brown clay</td>
</tr>
<tr>
<td>8-18</td>
<td>Sand and marine deposits</td>
</tr>
<tr>
<td>18-26</td>
<td>Very hard blue rock</td>
</tr>
<tr>
<td>26-53</td>
<td>Red/brown clay</td>
</tr>
<tr>
<td>53-89</td>
<td>Red/brown clay with sand and cinders</td>
</tr>
<tr>
<td>89-105</td>
<td>Blue rock</td>
</tr>
<tr>
<td>105-132</td>
<td>Broken rock and coral</td>
</tr>
<tr>
<td>132-155</td>
<td>Puka rock (water zone)</td>
</tr>
<tr>
<td>155-163</td>
<td>Blue rock</td>
</tr>
<tr>
<td>163-191</td>
<td>Puka rock (water zone)</td>
</tr>
<tr>
<td>191-195</td>
<td>Blue rock</td>
</tr>
</tbody>
</table>
E. EARTHQUAKE CONSIDERATIONS AND DESIGN PARAMETERS

The project site is in an Earthquake Seismic Zone 1. All facilities will be designed accordingly.

F. GROUNDWATER CONDITIONS

The Kealia Wells 1A & 2A lie within the Anahola Aquifer System. The system includes a segment of Napali volcanics in the Makaleha Mountains but chiefly consists of Koloa rocks. Large patches of coastal sediments also occur. High-level dike groundwater presumably exists in the Makaleha Mountains while perched aquifers are common in the Koloa formation. A basal lens in the Koloa basalts lies near the coast and is, in places, under artesian pressure such as at Kealia Wells 1A & 2A. The State Commission on Water Resource Management has estimated the system’s average groundwater recharge at roughly 36 percent of average rainfall, or 71 million gallons per day (mgd). Of this amount, it is estimated that roughly 51 percent, or 36 mgd, can be developed on a long-term sustainable basis.

Results of pump testing Kealia Wells 1A & 2A show that the wells can sustain withdrawals at a rate of 650 gallons per minute with less than 1 foot of drawdown. (See Appendix A for Results of Drilling and Testing of Kealia Wells 1A & 2A.)

G. FLOOD AND TSUNAMI CONSIDERATIONS

The Flood Insurance Rate Map for the area indicates that the project site is designated as Zone AE, an area designated as a special flood hazard area inundated by a 100-year flood. The wells will be protected from flooding so no flood water intrusion is expected. Preventive measures include a waterproof, windowless building with a wall height at 22 feet msl. The building will be ventilated through the roof. The door will be watertight. Submersible pumps will be installed in the wells.

H. CONFORMANCE WITH LOCAL LAND USE PLANNING AND ZONING REGULATIONS

The State Land Use classification is Agriculture. Accordingly, the County of Kauai has designated the area Agriculture. Well development projects are allowable in the Agriculture district.

I. WATER RIGHTS AND FUTURE USE BY OTHERS

In 1987, the State Water Code was enacted and the Commission on Water Resource Management (CWRM) was created. CWRM has the responsibility of protecting, controlling, and regulating ground and surface water resources throughout the State, while assuring established water rights and existing uses. Prior to well construction, pump testing, and permanent pump installation, permits must be obtained from the CWRM. The landowner
applied for well construction permits to drill and test the wells and received approval on October 19, 2000. A permanent pump installation permit was approved by the CWRM on February 20, 2001. Because the area has not been designated as a water management area by CWRM, no permit is required for water use.

IV. EXTENT OF WATERWORKS SYSTEM

A. NATURE AND EXTENT OF AREA SERVED

The water system serves 70 existing residences and a new 29-lot subdivision. There are no other service connections.

B. POPULATION, LAND USE, AND CONSUMPTION

1) Population: Distribution from the two 67,000 gallon tanks is to 70 existing service connections. The population served is individual homeowners.

2) Land Use: All of the land within the service area is zoned Agriculture. The surrounding area is essentially undeveloped former sugar cane lands.

3) Water Consumption: Upon full buildout, the estimated average day demand is 50,000 gpd and estimated maximum day demand is 75,000 gpd.

4) Water Consumption Forecast: There are no current plans to extend the water system service area beyond the new 29-lot subdivision and future development plans have not been reported.

C. APPRAISAL OF THE FUTURE REQUIREMENTS FOR SERVICE

At the present time, there are no known plans for future development.

D. PROVISIONS FOR EXTENDING WATER WORKS SYSTEM

There are no known plans for significant development within the water system service area.

E. FIRE PROTECTION AND PRESSURE REQUIREMENTS

The development of these new wells should improve the fire protection capability of the existing system by providing an new reliable source of water and additional storage capacity.

F. ALTERNATE SOLUTIONS

No Action: The "no action" alternative is not satisfactory since the existing Kealia water system does not meet current water system standards. Because of the old age
and extensiveness of the existing water system, a complete replacement of the water system was determined to be the most desirable and cost-efficient alternative.

Recommended Alternative: Based upon a cost-benefit analysis, development of the subject wells and new water system was considered to be superior to the no action alternative considered.

G. ENVIRONMENTAL AND ECONOMIC IMPACT

The development of Kealia Wells 1A & 2A is not expected to have any long-term negative environmental impacts. Anticipated environmental impacts will be short-term and limited to construction activities. Noise, dust, and air pollution controls are included in the contract specifications.

The development of these new wells and storage will allow the Kealia water system to meet current water system standards. This is the only source of domestic supply for the 70 existing and 29 new residences.

V. POTENTIAL SOURCES OF CONTAMINATION

A. DESCRIPTION OF WELL SITE

1) Coordinates: The Kealia Wells 1A & 2A are located at approximately N 22°06'13", W 159°18'38". The Tax Map Key is 4-7-03:02.

2) Surface Elevation: The elevation of Kealia Wells 1A & 2A is approximately 10 feet msl. The ground slope at the well site is approximately 4 percent.

3) Catchment Area: The estimated catchment area which drains toward the well is about 926 acres, with an average slope of about 6.5 percent. The drainage area spans a distance of about 7.75 miles, from the peak of Puu Eu at 2,700 feet to the coastline.

4) Soil and Substrata: The soils in the vicinity of the project consist of the Mokuleia series, well-drained soils along the island's coastal plains. These soils formed in recent alluvium deposited over coral sand. They are shallow and nearly level. At the well site, Mokuleia clay loam, poorly drained variant (Mta) occurs. This soil is nearly level and poorly-drained. The surface layer is dark brown to black and is mottled.

5) Well Depth: The Well Completion Report is shown in Exhibit 5, and an as-built well section is shown in Exhibit 6. The total depth of the wells below ground is 195 feet. The initial water level is ±2 feet below ground.
B. DESIGN WELL DRAFT

A 50-horsepower submersible pump, capable of pumping 650 gpm at 217 feet of head, will be installed into each of the 12-inch diameter cased wells.

C. WATER QUALITY

The results of the water quality analysis are contained in Appendix B. All constituents of the water were below the maximum contaminant levels established by DOH. Fecal and non-fecal coliform were not detected in a sample taken from Kealia Well 1A. The chlorination system is expected to effectively remove these contaminants from the well water prior to entering the distribution system.

D. LAND USE CLASSIFICATION OF SURROUNDING AREA

The surrounding area is primarily undeveloped former sugarcane agricultural lands that have been fallow for more than several years. Its designated land use is Agriculture.

E. SOURCES OF CONTAMINATION

1) Extent of Recharge Area: The Kealia Wells 1A & 2A lie within the Anahola Aquifer System, one of five aquifer systems in the Lihue Hydrologic Sector. The Anahola system embraces a mountain-to-ocean drainage area of 50 square miles and has a coastline that extends from Moloaa to Wailua. Much of the recharge to the system originates from precipitation in the mountains and upland areas of the Kealia Ahupua'a.

2) Types of Contaminants: Potential sources of contamination are the cesspools and pig farms at TMK 4-7-3:7 and 11. A chlorination system will be provided to protect the well water from contamination. There are no other known potential sources of contamination near the well site.

3) Distance to Proposed Well: TMK 4-7-3:7 and 11 are about 3,000 feet away from the wells.

4) Method of Disposal: The existing residences dispose their sewage to individual cesspools. A chlorination system will be provided to protect the well water from contamination.

5) Depth of Contaminant to Water Source: The aquifer is artesian and has a head ranging between 7 feet and 9 feet above mean sea level. The water table elevation is about 7 feet above mean sea level.
F. GROUNDWATER CONTOURS

The ground water head is approximately 8 feet above mean sea level at the well site.

VI. SOURCES OF WATER SUPPLY

A. NATURE OF SOIL AND STRATUM

The soils in the vicinity of the project consist of the Mokuleia series, well-drained soils along the island's coastal plains. These soils formed in recent alluvium deposited over coral sand. They are shallow and nearly level. At the well site, Mokuleia clay loam, poorly drained variant (Mta) occurs. This soil is nearly level and poorly-drained. The surface layer is dark brown to black and is mottled.

B. PROBABILITY AND EFFECT OF SURFACE DRAINAGE OR UNDERGROUND WATER CONTAMINATION

1) Surface Drainage: The constant-rate pump test showed drawdowns at the wells stabilized at about 1.5 feet after 2 days of pumping at 650 gpm. No recharge boundary was detected, indicating that surface waters are not impacted by pumping the wells.

2) Underground Water Contamination: Potential sources of contamination are the cesspools and pig farms at TMK 4-7-3:7 and 11. A hypochlorite chlorination system will be provided to protect the well water from contamination.

C. DEPTH TO WATER TABLE, LOCATION AND DESCRIPTION OF WELLS IN VICINITY

The aquifer's artesian head is approximately 2 feet below ground, or 8 feet above mean sea level. The location of wells in the vicinity of Kealia Wells 1A & 2A is shown in Exhibit 7. The closest wells are the two existing Kealia Wells 1 & 2 (Well Nos. 0618-01 & 02). These wells will be abandoned and sealed, according to Commission on Water Resource Management regulations, once Kealia Wells 1A & 2A are put into production. There are six other wells in the immediate vicinity of Well Nos. 0618-01 & 02. Well Nos. 0618-03 to 08 were also drilled by Lihue Plantation between 1905 and 1929. There is very little information
regarding these wells and their exact locations are unknown. Other nearby wells include Well Nos. 0518-01 & 02, located a little less than a mile to the south. Both are observation wells drilled in 1973 at Mahelona Hospital. Mahelona Hospital is also operating three disposal wells, Well Nos. 0518-03 to 05, located about a mile away near the coast. There are no other potable wells in the vicinity.

D. SLOPE OF THE WATER TABLE

The slope of the water table from the well site toward the shoreline is approximately 12.32 feet per mile.

E. FLOODING AND/OR EARTHQUAKE RISK

The Flood Insurance Rate Map for the area indicates that the project site is designated as Zone AE, an area designated as a special flood hazard area inundated by a 100-year flood. The wells will be protected from flooding so no flood water intrusion is expected. Preventive measures include a waterproof, windowless building with a wall height at 22 feet msl. The building will be ventilated through the roof. The door will be watertight. Submersible pumps will be installed in the wells.

The project site is in an Earthquake Seismic Zone 1. All facilities will be designed accordingly.

F. QUALITY AND QUANTITY OF SOURCE WATER

The results of the water quality analysis are contained in Appendix B. All constituents of the water were below the maximum contaminant levels established by DOH. Fecal and non-fecal coliform were not detected in a sample taken from Kealia Well 1A. The chlorination system is expected to effectively remove these contaminants from the well water prior to entering the distribution system.

A 650 gpm rated capacity pump, capable of pumping at a rate of 650 gpm into the water system, will be installed in each well. The average groundwater recharge to the Anahola Aquifer System is estimated to be roughly 36 percent of average rainfall, or 71 mgd. Of this amount, roughly 51 percent, or 36 mgd, can be developed on a long-term sustainable basis.

G. FACTORS IN POTENTIAL CONTAMINATION

Potential sources of contamination are the cesspools and pig farms at TMK 4-7-3:7 and 11. A chlorination system will be provided to protect the well water from contamination.
H. CONTROL MEASURES AGAINST CONTAMINATION

Control measures against contamination from the surface include a 4’x4’ concrete pad, 3-inch thick grouted annular space to a depth of 95 feet below the ground surface, and the installation of a solid casing that extends to 95 feet below the ground surface.

A chlorination system using a hypochlorite solution will be installed to provide disinfection for the water system.

I. SUMMARY

Although the potential sources of contamination, the cesspools and pig farms at TMK 4-7-3:7 and 11, are not likely to affect the new Kealia Wells, a chlorination system using a hypochlorite solution will be installed to provide disinfection for the water system.

VII. PROPOSED TREATMENT WORKS

A. PROCESS

The well water will be disinfected by injecting sodium hypochlorite into the pumped water before it leaves the well site (see Exhibit 9).

B. SITE

The chlorination system will be housed in the pump control/chlorination building located within the fenced well site (see Exhibit 4).

C. PLANT MODIFICATIONS

This section is not applicable.

D. BASIS OF DESIGN

The sodium hypochlorite system will be designed in accordance with the estimated maximum day demand of 0.075 mgd.

E. WASTE DISPOSAL

There is no water disposal associated with the sodium hypochlorite system.

F. OPERATION AND MAINTENANCE

Operation and maintenance of the sodium hypochlorite system are mainly procedures associated with the electrodes of the package system and the separate dual metering pumps for
injection of the solution. Kealia Mauka Holdings, LLC will be responsible for operation and maintenance of the system.

VIII. PUMPING FACILITIES

A. PURPOSE OF SERVICE

A 50-horsepower 650 gpm rated capacity submersible pump will be installed in each of two new wells to pump water from the Koloa basalt aquifer and deliver it to the water system.

B. PUMPING LAYOUT

The proposed pump section, discharge line assembly, and materials are shown in Exhibit 8. A new 8-inch ductile iron line will be installed to connect the wells to a new 12-inch high density polyethylene transmission line to the tanks.

C. DESIGN FLOW REQUIREMENTS

The well water will be used to meet average and maximum day demands for 70 existing and 29 new units at Kealia Plantation. The estimated average day demand is 0.050 mgd maximum day demand is 0.075 mgd.

D. LIQUID CHARACTERISTICS

The characteristics of the water are as indicated in the water quality analysis and as described in Section V.C.

E. ELECTRIC POWER

Electrical improvements consist of connecting to the existing overhead power line and installing an electric meter, service equipment, motor control center, power, and control wiring for the pumps, chlorination system, and water tank float level switches.

F. PUMPING ARRANGEMENTS

The well pumps will be controlled by float level switches installed in the two steel storage tanks. Kealia Well 1A will be the primary water supply source and Kealia Well 2A will serve as a standby source.

G. PUMP SELECTION

The submersible pumps will be 10” Grundfos, Model 6255, 50 H.P., units, capable of pumping 650 gpm at 217 feet of head (pump efficiency not less than 85%). A detailed description of the submersible pumping unit and appurtenances is shown in Exhibit 8.
H. PROPOSED BUILDINGS AND OTHER STRUCTURAL IMPROVEMENTS

A single story, concrete slab-on-grade control building with concrete masonry unit walls and corrugated metal roof will be constructed at the well site to house the motor control center and chlorination system. Detailed plans for the chlorination shed is shown in Exhibit 9.

I. WATER HAMMER CONSIDERATIONS

The water hammer effect is caused by the sudden shut-off of a pump or the rapid closing of valves. The system was hydraulically designed to avoid potential water hammer conditions.

J. ESSENTIAL FEATURES OF CONSTRUCTION AND OPERATION

The system consists of two 195-feet deep, 12-inch diameter wells cased to a depth of 93 feet below ground, in a chain-link fenced site containing a 16’ by 23.3’ hollow-tile pump control/chlorination building. The wells are connected by a 12-inch diameter high density polyethylene pipeline to two 67,000 gallon steel storage tanks located approximately 3,000 feet to the northwest at an elevation of approximately 200 feet.

K. ELECTRICAL SYSTEM

Electrical power for the system will be provided by Kauai Electric. There will be no provisions for standby power.

IX. FINISHED WATER STORAGE

The water will be boosted and stored in two parallel-connected 67,000 gallon steel tanks with a floor elevation of 204 feet.

X. WATER DISTRIBUTION SYSTEM

A. GENERAL LAYOUT OF THE SYSTEM

New 8-inch and 12-inch ductile iron pipe will be used to connect the two new wells, located at an approximate elevation of 10 feet, to a new 12-inch high density polyethylene transmission line that will extend from the well site to two new 67,000 gallon steel storage tanks located about 3,000 feet away at an approximate elevation of 200 feet. The 12-inch reservoir line will be installed along Kealia Road and will connect to the two 67,000 gallon steel tanks. A second new 12-inch high density polyethylene line will be installed adjacent to the 12-inch reservoir line to deliver the water from the tanks to the residences. The general layout of the system is shown in Exhibit 10.
B. WATER SYSTEM MATERIALS

All materials will be designed and specified in accordance with the Hawaii Water System Standards, Volumes I and II, dated 1985.

C. PROXIMITY TO OTHER UTILITIES

The closest existing utilities (water, power, telephone) are located approximately half a mile away along Kuhio Highway.

D. PHASED CONSTRUCTION/FUTURE DEVELOPMENT

Phased construction is not anticipated for this project.

E. DATA AFFECTING INSTALLATION OF THE DISTRIBUTION SYSTEM

Not applicable.

XI. FINANCING

The project was funded by the landowner, Kealia Mauka Holdings, LLC, who will be the owner and operator of the water system.
XII. REFERENCES (listed in Chronological Order)


Preliminary Engineering Report for
New Potable Water Sources
Kesia Wells 1A & 2A
Kesia Mauka Holdings, LLC

LOCATION MAP

Exhibit 1
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
WELL COMPLETION REPORT - PART I  
Well Construction  

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwrml

<table>
<thead>
<tr>
<th>1. State Well No.: 0618-09</th>
<th>Well Name: Kealia Makai Well 1A</th>
<th>Island: Kauai</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address: Kealia</td>
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<tr>
<td>3. Drilling Company: Oasis water Systems Inc.</td>
<td>Tax Map Key: 4-7-03:2</td>
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<tr>
<td>4. Drilling method used during construction: ☑ Rotary ☐ Percussion ☐ Other</td>
<td>(describe) Top Head Direct Rotary</td>
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<tr>
<td>5. Date Well Construction (drilled, cased, grouted) completed: 1/4/01</td>
<td>Attach Driller's Log (7/25/99 DL Form)</td>
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In addition to the driller's log, if a geologic log was prepared, please submit with this form.

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<tr>
<td>8. Step-Drawdown Test completed?</td>
<td>☑ Yes ☐ No</td>
</tr>
<tr>
<td>9. Constant Rate Aquifer Test completed?</td>
<td>☑ Yes ☐ No</td>
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<tr>
<td>Parameters prior to pump test:</td>
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<tr>
<td>10. Water-level: 7 ft. above msl</td>
<td>Date and time of measurement: 1/25/01 8am</td>
</tr>
<tr>
<td>11. Chloride: 45 ppm</td>
<td>Date and time of sampling: 1/25/01 8am</td>
</tr>
<tr>
<td>12. Temperature: 72 °F</td>
<td>Date and time of measurement: 1/25/01 8am</td>
</tr>
<tr>
<td>13. Fill in the as-built section on the other side of this sheet.</td>
<td></td>
</tr>
<tr>
<td>15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)</td>
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</tr>
<tr>
<td>16. Remarks:</td>
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<table>
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<tr>
<th>Licensed Driller (print)</th>
<th>Steve Goldberg</th>
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<tbody>
<tr>
<td>Signature</td>
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<tr>
<th>Surveyor (print)</th>
<th>Taz Denne K. Eski</th>
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<td>L.P.L.S. Lic. No.</td>
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<tr>
<th>Permittee (print)</th>
<th>Justin Hughes</th>
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Preliminary Engineering Report for New Potable Water Sources Kealia Wells 1A & 2A Kealia Mauka Holdings, LLC

WELL COMPLETION REPORT  
KEALIA 1A  
Exhibit 5
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
WELL COMPLETION REPORT - PART I  
Well Construction

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 837-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwwm/

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<tr>
<td>2. Address: Kealia</td>
<td>Island: Kauai</td>
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<tr>
<td>3. Drilling Company: Oasis water Systems Inc.</td>
<td>Tax Map Key: 4-7-03:2</td>
</tr>
<tr>
<td>4. Drilling method used during construction:</td>
<td>(describe) Top Head Direct Rotary</td>
</tr>
<tr>
<td>5. Date Well Construction (drilled,cased,grouted) completed:</td>
<td>1/20/01</td>
</tr>
<tr>
<td>6. Was the subject well cored?</td>
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</tr>
<tr>
<td>7. Initial water-level encountered: 5' 8&quot; ft. below ground</td>
<td>Date and time of measurement: 12/6/00</td>
</tr>
<tr>
<td>8. Step-Drawdown Test completed?</td>
<td>Yes □ No □</td>
</tr>
<tr>
<td>9. Constant Rate Aquifer Test completed?</td>
<td>Yes □ No □</td>
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<tr>
<td>10. Water-level: 7' ft. above msl</td>
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<td>11. Chloride: 45 ppm</td>
<td>Date and time of sampling: 2/1/01 10am</td>
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<tr>
<td>12. Temperature: 72 °F</td>
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<td>16. Remarks:</td>
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<tr>
<td>Licensed Driller (print): Steve Goldberg</td>
<td>C-57 Lic. No. 21457</td>
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<td>Signature:</td>
<td>Date 2-14-01</td>
</tr>
<tr>
<td>Surveryor (print): Dennis M. Pestka</td>
<td>L.P.L.S Lic No 4383</td>
</tr>
<tr>
<td>Signature:</td>
<td>Preliminary Engineering Report for New Potable Water Sources Kealia Wells 1A &amp; 2A Kealia Mauka Holdings, LLC</td>
</tr>
<tr>
<td>Permitter (print): Justin Hughes</td>
<td>WELL COMPLETION REPORT KEALIA 2A Exhibit 5</td>
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<tr>
<td>Signature:</td>
<td></td>
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Solid Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200  □ API Spec. 5L  □ ASTM A53  □ ASTM A139
And compliant with (check one or more): □ ASTM A242  □ Type E  □ Type S  □ Grade B  □ Other A606 Type
Stainless Steel: (check one):
□ ASTM A409 (production wells)  □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40  □ Schedule 80
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40  □ Schedule 80  □ Schedule 12
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200  □ API Spec. 5L  □ ASTM A53  □ ASTM A139
And compliant with (check one or more): □ ASTM A242  □ Type E  □ Type S  □ Grade B  □ Other
Stainless Steel: (check one):
□ ASTM A409 (production wells)  □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one)
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one)
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
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□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296
Preliminary Engineering Report for
New Potable Water Sources
Kealia Wells 1A & 2A
Kealia Mauka Holdings, LLC

OTHER NEARBY WELLS
Exhibit 7
STEP-DRAWDOWN TEST
KEALIA WELL 1A (0618-09), KAUAI
Date of Test: Jan 18, 2001

Drawdown, in ft.

Minutes, since pumping started

Drawdown

Water Resource Associates
1298 DEC 1a
PUMPING RATE-DRAWDOWN CURVE
KEALIA WELL 1A (0618-09), KAUAÍ
Date of Test: Jan 18, 2001, TD=195 ft.

Drawdown, in ft.

0 100 200 300 400 500 600 700 800 900 1000
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3
CONSTANT RATE TEST
KEALIA WELL 1A (0618-09), KAUAI
Date of Test: Jan 29-31, 2001

Water Resource Associates
129CRT1A
STEP-DRAWDOWN TEST
KEALIA WELL 2A (0618-10), KAUAI
Date of Test: Feb 2, 2001

Drawdown, in ft.

Minutes, since pumping started

Water Resource Associates
1234567890
PUMPING RATE-DRAWDOWN CURVE
KEALIA WELL 2A (0618-10), KAUAI
Date of Test: Feb 2, 2001, TD=195 ft.

Drawdown, in ft.

Pumping Rate, in gpm
CONSTANT-RATE TEST
KEALIA WELL 2A (0618-10), KAUAI
Date of Test: Feb 2-4, 2001

Pumping Rate (Right Scale)
Drawdown (Left Scale)
Chlorides (Right Scale)
Laboratory Report

for

Water Resource Associates
1188 Bishop Street Suite 1708
Honolulu, HI 96813-3307

Attention: Dan Lum
Fax: (808) 528-0808

DATE OF ISSUE
MAR 09 2001

Hillary Strayer
Project Manager

Report#: 74696

Laboratory certifies that the test results meet all QA/QC requirements unless noted in the Comments section or the Case Narrative. Following the cover page are Comments, QC Report, QC Summary, Data Report, Hits Report, totaling 39 page[s].
ACKNOWLEDGMENT OF SAMPLES RECEIVED

Water Resource Associates
1188 Bishop Street Suite 1708  Customer Code: WRA
Honolulu, HI 96813-3307     Group#: 74696
Attn: Dan Lum  Project#: DRINKING
Phone: (808) 528-0074  Proj Mgr: hillary Strayer

The following samples were received from you on 02/01/01. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Montgomery Watson Laboratories.

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<th>Sample#</th>
<th>Sample Id</th>
<th>Matrix</th>
<th>Tests Scheduled</th>
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<td>KEALIA 1-A</td>
<td>Water</td>
<td>@DIQUAT, @EDB-DBC, @ML525, @ML531, @NPS3, @PESTSDW, @VOASDWA, ALK, AS-MS, BA-MS, BE-MS, CA, CD-MS, CNOW, CR-MS, CU-MS, EC, ENDOThAL, F, GLYPHOS, HG, NI-MS, NO2-N, NO3, PB-MS, PH, SB-MS, SE-MS, TCDD-DW, TEMP, TL-MS</td>
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Test Acronym Description

- @DIQUAT: Diquat and Paraquat
- @EDB-DBC: EDB and DBCP by GC-ECD
- @ML525: 525 Semivolatiles by GC/MS
- @ML531: Aldicarcs
- @NPS3: Herbicides by 515.1
- @PESTSDW: SDWA Pesticides
- @VOASDWA: Regulated VOCs plus Lists 1&3
- ALK: Alkalinity
- AS-MS: Arsenic, Total, ICAP/MS
- BA-MS: Barium, Total, ICAP/MS
- BE-MS: Beryllium, Total, ICAP/MS
- CA: Calcium, Total, ICAP
- CD-MS: Cadmium, Total, ICAP/MS
- CNOW: Cyanide
- CR-MS: Chromium, Total, ICAP/MS
- CU-MS: Copper, Total, ICAP/MS
- EC: Specific Conductance
- ENDOThAL: Endothall
- F: Fluoride
- GLYPHOS: Glyphosate
- HG: Mercury
- NI-MS: Nickel, Total, ICAP/MS
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<th>Description</th>
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<td>NO2-N</td>
<td>Nitrite, Nitrogen by IC</td>
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<tr>
<td>NO3</td>
<td>Nitrate-N by IC</td>
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<tr>
<td>PB-MS</td>
<td>Lead, Total, ICAP/MS</td>
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<tr>
<td>PH</td>
<td>Lab pH</td>
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<tr>
<td>SB-MS</td>
<td>Antimony, Total, ICAP/MS</td>
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<tr>
<td>SE-MS</td>
<td>Selenium, Total, ICAP/MS</td>
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<tr>
<td>TCDD-DW</td>
<td>2,3,7,8 - TCDD</td>
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<tr>
<td>TEMP</td>
<td>Source Temperature</td>
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<tr>
<td>TL-MS</td>
<td>Thallium, Total, ICAP/MS</td>
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Group Comments

(TCDD) Analyzed by Pace Analytical, Minneapolis, MN.

(QC Ref#: 134327)
Test: Methyl Tert-butyl ether (MTBE)
QC Type: MSD
MS/MSD not method specified QC. Possible matrix interaction

Test: Trichlorotrifluoroethane (Freon)
QC Type: MSD
MS/MSD not method specified QC. Possible matrix interaction

(QC Ref#: 134407)
Test: Acifluorfen (qualitative)
QC Type: LCS1
Recovery failed low, sample results may have a low bias.
Method defines acifluorfen as qualitative. QIR-GC-01-051.

QC Type: MS
Recovery failed low, sample results may have a low bias.
Method defines acifluorfen as qualitative. QIR-GC-01-051.

QC Type: MSD
Recovery failed low, sample results may have a low bias.
Method defines acifluorfen as qualitative. QIR-GC-01-051.
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2102010041 KEALIA 1-A

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SUMMARY OF POSITIVE DATA ONLY.
## Laboratory Data Report
**#74696**

### Water Resource Associates
Dan Lum  
1188 Bishop Street Suite 1708  
Honolulu, HI 96813-3307

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| 02/13/01 | 02/22/01 | 00:00    | 135473   | (ML/ML 525.2) | Alachlor           | ND     | ug/l  | 0.050| 1        |
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| 02/13/01 | 02/22/01 | 00:00    | 135473   | (ML/ML 525.2) | Anthracene         | ND     | ug/l  | 0.020| 1        |

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### Water Resource Associates

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<td>(ML/EPA 531.1)</td>
<td>Baygon</td>
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<tr>
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<td>Carbofuran (Furadan)</td>
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### Diquat and Paraquat

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<th>Method</th>
<th>Analyte</th>
<th>Result</th>
<th>Units</th>
<th>MRL</th>
<th>Dilution</th>
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### EDB and DBCP by GC-ECD

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<th>Result</th>
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<th>MRL</th>
<th>Dilution</th>
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<td>(ML/EPA 504.1)</td>
<td>Dibromochloropropane (DBCP)</td>
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<td>Ethylene Dibromide (EBD)</td>
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### Herbicides by 515.1

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<th>Method</th>
<th>Analyte</th>
<th>Result</th>
<th>Units</th>
<th>MRL</th>
<th>Dilution</th>
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<td>02/05/01 02/22/01 00:00</td>
<td>134407</td>
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## Wells at and in vicinity of Kealia Plantation
(exported from database 08/07/2008)

<table>
<thead>
<tr>
<th>Well No.</th>
<th>Well Name</th>
<th>Owner/Operator</th>
<th>Year Drilled</th>
<th>Use</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Ground Elev. (ft, mal)</th>
<th>Depth (ft, bgs)</th>
<th>Casing Dia. (in.)</th>
<th>Solid Casing (ft, bgs)</th>
<th>Bottom of Hole (ft, mal)</th>
<th>Bottom, Static Head (ft, mal)</th>
<th>Initial Chloride (mg/l)</th>
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</thead>
<tbody>
<tr>
<td>0618-01</td>
<td>Kealia 2</td>
<td>Lihue Plantation / Kealia Water Company Holdings, LLC (2002)</td>
<td>1898</td>
<td>ABNSLD</td>
<td>220603</td>
<td>1591827</td>
<td>8</td>
<td>213</td>
<td>10</td>
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<td>0618-02</td>
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<td>ABNSLD</td>
<td>220615</td>
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<td>0618-08</td>
<td>Kumukumu St</td>
<td>Lihue Plantation / Kealia Plantation Company, LLC (2002)</td>
<td>1929</td>
<td>DOM?</td>
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<td>0618-09</td>
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<td>Kealia Mauka Holdings / Kealia Water Company Holdings, LLC</td>
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<td>-185</td>
<td>-85</td>
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Compiled by DE Mills, 8/8/2008
G:\USERS\cmillde\Well & Pump Permits\Kauai\0618\Kealia Plantation Wells.xls
### Kealia_Wells

#### Wells at and in vicinity of Kealia Plantation
(exported from database 08/07/2008)

<table>
<thead>
<tr>
<th>Well No.</th>
<th>Well Name</th>
<th>Owner/Operator</th>
<th>Installed Pump Capacity (gpm)</th>
<th>Pumping Capacity (mgd)</th>
<th>Test Pumping Rate (gpm)</th>
<th>Specific Capacity (gpm/ft-dd)</th>
<th>T (ft²/day)</th>
<th>Comments</th>
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</thead>
<tbody>
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<td>0618-06</td>
<td>Kealia 6</td>
<td>Lihue Plantation / Kealia Plantation Company, LLC (2002)</td>
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<td></td>
<td>Ltr. dated 3-3-03, sent to owner requesting response to abandonment/sealing for wells 0618-03-07. Well modification, 6-in. dia. casing replaces 12-in. to 135.7 ft bgs, DTW=5 ft. bgs (3/13/2008)</td>
</tr>
<tr>
<td>0618-08</td>
<td>Kumukumu St</td>
<td>Lihue Plantation / Kealia Plantation Company, LLC (2002)</td>
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<td></td>
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<td>Ltr. dated 3-3-03, sent to owner requesting response to abandonment/sealing for wells 0618-03-07.</td>
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<td>0618-09</td>
<td>Kealia 1A</td>
<td>Kealia Mauka Holdings / Kealia Water Company Holdings, LLC</td>
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The information provided below is not a certification of good standing and does not constitute any other certification by the State. Website URL: http://hbe.ehawaii.gov/documents

Business Information

<table>
<thead>
<tr>
<th>MASTER NAME</th>
<th>KEALIA WATER COMPANY HOLDINGS, LLC</th>
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<tr>
<td>BUSINESS TYPE</td>
<td>Foreign Limited Liability Company (LLC)</td>
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<tr>
<td>FILE NUMBER</td>
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<td>STATUS</td>
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<td>PURPOSE</td>
<td>ACQUISITION, OWNERSHIP, DEVELOPMENT AND POSSIBLE SALE OF REAL PROPERTY IN HAWAII, AND ACQUISITION, OWNERSHIP AND OPERATION OF WATER SYSTEMS IN HAWAII</td>
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<tr>
<td>PLACE INCORPORATED</td>
<td>Delaware UNITED STATES</td>
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<tr>
<td>REGISTRATION DATE</td>
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<tr>
<td>MAILING ADDRESS</td>
<td>11001 W. 120TH AVENUE, SUITE 310</td>
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<td>BROOMFIELD, Colorado 80021</td>
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<tr>
<td>MANAGED BY</td>
<td>MANAGER(S)</td>
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<tr>
<td>AGENT NAME</td>
<td>PAUL ALSTON</td>
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<td>AGENT ADDRESS</td>
<td>ALSTON, HUNT, FLOYD &amp; ING</td>
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<td>18TH FL ASB TOWER</td>
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Annual Filings

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Officers

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<td>FROM: ROY</td>
<td>DATE: 11/3</td>
<td>SUSPENSE DATE:</td>
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<td>YOSHINAGA, M.</td>
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FOR:  
- Approval
- Signature Information
- 1/2

PLEASURES:  
- See Me
- Review & Comment
- Take Action
- Type Draft
- Type Final
- Xerox copies

1) Kealakehe (LEC) not sure.  
2) PCC Hawaii, etc.

Though PRC is lancing, seems like personal concern makes effective "landmark/roadowner" of wells, hence they should be responsible.
Via Hand Delivery
Denise Mills
Commission on Water
Resource Management
Department of Land and
Natural Resources
State of Hawaii
1151 Punchbowl St., Rm. 227
Honolulu, Hawai'i 96813

EAH / 9163-1
September 5, 2008

Via Hand Delivery
Ken C. Kawahara, P.E., Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96813

Re: Supplemental information relating to ownership of Well Nos. 0618-09 and 0618-10 (TMK (4) 4-7-003:002)

Dear Mr. Kawahara:

We represent Kealia Water Company Holdings, LLC ("KWC"). We are responding to your request for information to verify ownership of Well Nos. 0618-09 (Kealia Well 1A) and 0618-10 (Kealia Well 2A).

Your records are correct in that these wells are located on TMK (4) 4-7-003:002, owned by Plantation Partners Kauai, LLC ("PPK"). However, KWC holds a perpetual easement over the land on which the wells are located, and KWC has sole control over the wells. Therefore, for purposes of HAR Chapter 13-168 and all other laws relevant to CWRM, KWC is the operator and, effectively, the owner of these wells. Copies of the Grant of Easements recorded March 9, 2006 and the deed to PPK filed March 24, 2006 are attached as Exhibits A and B, respectively. These documents identify express, perpetual easements to KWC where these wells are located.

We request your office update and supplement the records with this information, to reflect KWC as the owner and operator of these wells.
If you have any further questions, please contact us.

Sincerely,

Paul Alston
Elizabeth Haws Connally

PA:EAH:bmld

Attachments

cc (w/attachments):
  Client
  PPK (Attention: Dennis Lombardi)
GRANT OF EASEMENTS

THIS GRANT OF EASEMENTS (this "Grant") is made this 22nd day of December, 2004 (the "Effective Date"), by and among KEALIA PLANTATION COMPANY, LLC, a California limited liability company ("KPC"), whose post office address is c/o Belles Graham Proudfoot & Wilson, Watumull Plaza, 4334 Rice Street, Suite 202, Lihue, Hawaii 96766-1388, Attention: Lorna A. Nishimitsu, Esq., and KEALIA WATER COMPANY HOLDINGS LLC, a Delaware limited liability company (the "Water Company"), whose post office address is 6461 Hanaala Road, Kapaa, Hawaii 96746.

RECITALS

A. KPC is the owner of certain real property situated in the County of Kauai, State of Hawaii, more particularly described on Exhibit A attached hereto (the "KPC Parcels") and denoted as "Segment B Serviced Lands" on the map attached hereto as Exhibit B (the "Map").

B. The Water Company was established to access, construct, operate, maintain, repair, replace, improve and expand a potable water infrastructure existing on the date of the formation of the Water Company, including, but not limited to, well facilities, pumps, water lines, pipes, treatment facilities, storage facilities, mechanical facilities, measuring devices, and other appurtenances associated with these structures (collectively, the "Infrastructure"), and to divert, treat and deliver potable water. The location of the Infrastructure is shown on the survey attached hereto as Exhibit C (the "Survey"). The Water Company holds title to all components of the Infrastructure which constitute personal property. A portion of the Infrastructure is located on the KPC Parcels, as shown on the Survey.
C. KPC desires to grant to the Water Company certain easements necessary for the operation, repair, replacement, usage, expansion (subject to Paragraph 4 below), and maintenance of the Infrastructure, in accordance with the terms of this Grant, as more particularly provided herein.

NOW, THEREFORE, in consideration of the promises and agreements set forth below, and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Creation and Grant of Express Easements. KPC hereby creates and grants to the Water Company, for the benefit of the Water Company, for the limited purposes set forth in Paragraph 2 below, four (4) express, perpetual, appurtenant easements (each, an “Easement” and, collectively, the “Easements”) solely in the locations shown on the Survey and described on Exhibit D attached hereto (collectively, the “Easement Area”). As more particularly shown on the Survey and described Exhibit D hereto, the Easements are denoted as “Easement W-6,” “Easement W-7,” “Easement W-8” and “Easement A.”


(a) The Easements created hereunder shall be used by the employees, contractors, agents, members and managers (collectively, “Representatives”) of the Water Company solely for the purposes described below and for no other purpose or purposes:

(i) Easement W-6 may only be used for the following purposes:

(A) Section A of Easement W-6 (as delineated and shown on the Survey) may only be used for the purpose of accessing, inspecting, constructing, operating, maintaining, repairing, replacing, improving and, subject to Paragraph 4 below, expanding, the well facilities, treatment facilities, mechanical equipment, waterlines and pipes servicing such facilities and the other Infrastructure located within said Section A at any time during the term, and in accordance with the requirements, of this Grant.

(B) Section B of Easement W-6 (as delineated and shown on the Survey) may only be used for (1) access to Section A of Easement W-6, and (2) accessing, inspecting, constructing, operating, maintaining, repairing, replacing, improving and, subject to Paragraph 4 below, expanding, the waterlines, pipes and other Infrastructure located within said Section B at any time during the term, and in accordance with the requirements, of this Grant. Except to the extent described in the preceding sentence with respect to waterlines and pipes, the Water Company shall have no right to construct or install any equipment, fixtures or other facilities or improvements within Section B of Easement W-6.

(ii) Easement W-7 may only be used for the following purposes:

(A) Section A of Easement W-7 (as delineated and shown on the Survey) may only be used for the purpose of accessing, inspecting, constructing, operating, maintaining, repairing, replacing, improving and, subject to Paragraph 4
below, expanding, the storage facilities, mechanical equipment, waterlines and pipes servicing such storage facilities and the other Infrastructure located within said Section A at any time during the term, and in accordance with the requirements, of this Grant.

(B) Section B of Easement W-7 (as delineated and shown on the Survey) may only be used for the purpose of accessing, inspecting, constructing, operating, maintaining, repairing, replacing, improving and, subject to Paragraph 4 below, expanding, the waterlines, pipes and other Infrastructure located within said Section B at any time during the term, and in accordance with the requirements, of this Grant. Except to the extent described in the preceding sentence with respect to waterlines and pipes, the Water Company shall have no right to construct or install any equipment, fixtures or other facilities or other improvements within Section B of Easement W-7.

(iii) Easement W-8 may only be used for the purpose of accessing, inspecting, constructing, operating, maintaining, repairing, replacing, improving and, subject to Paragraph 4 below, expanding, the waterlines and pipes and other Infrastructure located within Easement W-8 at any time during the term, and in accordance with the requirements, of this Grant. Except to the extent described in the preceding sentence with respect to waterlines and pipes, the Water Company shall have no right to construct or install any equipment, fixtures or other facilities within Easement W-8.

(iv) Easement A may only be used for the purpose of accessing Section A and Section B of Easement W-7.

(b) Notwithstanding anything to the contrary contained in Paragraph 2(a) above or any other provision of this Grant, (i) all waterlines, pipes and other Infrastructure and improvements constructed after the Effective Date within the Non-Exclusive Easement Area (as hereinafter defined) shall at all times be and remain a minimum of three (3) feet below the surface of the land, and after the Effective Date the Water Company shall have no right to install any Infrastructure on or above the surface of the land or to otherwise use the surface of the land within the Non-Exclusive Easement Area other than for purposes of gaining access to the Infrastructure located within (and beneath the surface of) the applicable portion of the Non-Exclusive Easement Area (and then only to the extent provided in Paragraph 2(a) above and Paragraph 2(e) below), and (ii) no building, structure or other improvement in excess of thirty (30) feet in height above grade shall be constructed after the Effective Date within the Exclusive Easement Area (as hereinafter defined). In the event the Water Company shall desire to install air vents, measuring devices or other components of the Infrastructure on or less than three (3) feet below the surface of the land within the Non-Exclusive Easement, then the Water Company shall request the prior written consent of KPC, which consent shall not be unreasonably withheld or delayed by KPC; provided that KPC's consent will not be deemed unreasonably withheld if KPC has plans pending to improve or develop, or contemplates the future improvement or development of, the area on which the Water Company desires to install the new Infrastructure above grade or less than three feet below grade.

(c) No rights of access, appurtenant or otherwise, over or across the KPC Parcels or to the Easements, exist or are hereby granted or implied, except as specifically provided in Paragraph 2(a) above. Notwithstanding the foregoing, in the event that Water

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Company requires access over or across the KPC Parcels to handle an emergency (which, for purposes of this Agreement, shall mean imminent danger of injury to persons or the Infrastructure), and if the Water Company is prevented from using the Easements for access purposes, then upon request by the Water Company, KPC shall give the Water Company temporary access rights over and across then-unimproved portions of the KPC Parcels designated by KPC in order to prevent, mitigate, remediate, or otherwise address such emergency.

(d) Section A of Easement W-6 and Section A of Easement W-7 (collectively, the "Exclusive Easement Area") shall be exclusive to the Water Company; provided, however, that KPC shall have the right to enter upon the Exclusive Easement Area (i) for the purpose of inspecting the same and confirming the Water Company’s compliance with the terms of this Grant, (ii) in the case of an emergency (as determined by KPC in its good faith judgment), (iii) as necessary to exercise KPC’s rights under Paragraph 14 below, and (iv) for the purpose of showing the same to prospective purchasers of all or portions of the KPC Parcels and prospective lenders providing financing to KPC (provided that such prospective purchasers and lenders shall be accompanied by a representative of KPC when entering upon the Exclusive Easement Area). All other sections of the Easements created and granted hereunder (i.e., Section B of Easement W-6, Section B of Easement W-7, Easement W-8 and Easement A), and any replacement easements granted pursuant to Paragraph 5(a) below, shall be non-exclusive (collectively, the "Non-Exclusive Easement Area"). Except as expressly provided herein to the contrary, KPC shall have the right to use, and to allow third parties to use (whether pursuant to lease agreements, licenses, easements or otherwise), the Non-Exclusive Easement Area for any purpose or purposes acceptable to KPC in its sole and absolute discretion, provided only that (i) such use shall not materially and unreasonably interfere with the operation of the Infrastructure as a functioning potable water system; and (ii) KPC will not construct, or permit the construction of, any buildings within the Non-Exclusive Easement Areas.

(e) Subject to the terms of this Paragraph 2(e), the Water Company may, but shall not be obligated to, landscape and maintain the Exclusive Easement Area; provided, however, that the Water Company shall at all times maintain the vegetation within the Exclusive Easement Area in a neat and orderly condition. The Water Company shall have no right to landscape, improve or otherwise modify the surface or any portion of the Non-Exclusive Easement Area or the KPC Parcels, excepting only that the Water Company shall have the right to disturb the surface of the Non-Exclusive Easement Area solely to the extent required to gain access to the Infrastructure located within (and beneath the surface of) the applicable portion of the Non-Exclusive Easement Area, provided that, following any such disturbance, the Water Company shall promptly return the affected areas to the condition required under Paragraphs 3(a) and 6(b) below. Notwithstanding any approval granted by KPC hereunder, the Water Company shall at all times ensure that the landscaping located within the Exclusive Easement Area does not grow to or reach a height greater than thirty-five (35) feet above grade.

3. **Maintenance and Use of Easement Areas; Rights of Access.**

(a) The Water Company and its Representatives, in exercising the rights granted hereunder, shall replace any earth removed by it or them and restore the surface of the ground around any excavation of the Easement Area to as near the same condition as it was in prior to such excavation as is commercially reasonable and shall, at the request of KPC, regrass
over the affected areas as provided in Paragraph 6(b) below. The Water Company shall cause all construction and installations to be conducted in a good and workmanlike manner in accordance with all federal, state and local laws, statutes, ordinances, orders, rules and regulations (collectively, "Laws"). The Water Company's use of the Easement Area and operation of the Infrastructure shall at all times comply with all Laws. In exercising its rights of access granted hereunder, the Water Company shall use commercially reasonable efforts, where practicable, to avoid interfering with the quiet enjoyment of the lands constituting the Non-Exclusive Easement Area and the lands surrounding and abutting the Easement Area.

(b) The Water Company shall at all times maintain locked chain link fences or other fences of at least a height and quality as exists on the Effective Date around the perimeter of the Exclusive Easement Area. The Water Company shall provide KPC with keys to all such locks to permit KPC to access the Exclusive Easement Area as provided in Paragraph 2(d) above, provided that such access is not contrary to applicable Laws.

4. No Right to Drill Additional Wells or Increase Pumping Capacity; Reservation of Rights. The Water Company shall have no right to drill new wells outside of the Exclusive Easement Area, to increase the pumping capacity of the Infrastructure beyond that existing on the Effective Date, or to take water from the KPC Parcels in excess of One Million Eight Hundred Seventy-two Thousand (1,872,000) gallons per day or such greater amount as the Water Company and KPC may hereafter agree in writing. Subject only to the right of the Water Company described in the immediately preceding clause, KPC reserves all rights to potable water in, on, under or appurtenant to the KPC Parcels, including, without limitation, the right to extract such potable water using any means selected by KPC in its sole discretion, and the right to form a potable water company (separate and apart from the Water Company) for the extraction and distribution of such water.

5. Relocation.

(a) KPC may request the realignment of the Infrastructure in any manner it deems necessary or desirable for the subsequent development or improvement of the KPC Parcels or otherwise provided that such realignment is accomplished in a manner so as to minimize interruption of and/or interference with, and so that there is no material diminishment in the quantity or quality of flow of water within, the Infrastructure. Plans, surveys and specifications for all such realignments or modifications shall be first presented to the Water Company, which shall approve such modifications and realignments in a timely manner, provided that the Water Company shall have the right to impose reasonable conditions to ensure that the quality and quantity of water carried by the Infrastructure will not be materially interrupted or diminished by such activities. KPC (or an owners association in the event KPC Subdivides (as hereinafter defined) the KPC Parcels as provided in Paragraph 15 below) shall cause the realignment to be completed in a workmanlike manner and shall bear all expenses associated with realigning, altering or modifying the Infrastructure (including paying the reasonable fees of the Water Company's consulting engineer to review the plans and specifications for such realignment or modification). KPC (or an owners association as appropriate) shall also indemnify, defend and hold the Water Company and its managers, members, officers, employees and agents harmless for any injury to person or property proximately caused by the realignment, alteration or modification of the Infrastructure. Upon the
completion of any realignment, KPC (or the applicable owner, as appropriate) shall convey to the Water Company all additional Infrastructure installed in connection with such realignment and shall survey the new alignments and grant a replacement easement upon the same terms and conditions set forth herein and reasonably acceptable to the Water Company (whereupon, the Water Company and its respective successors and assigns, shall vacate any portion of the Easement which has been replaced by a new easement as provided for in this paragraph). In addition, KPC shall provide surveys showing the specific location of the “as-built” and relocated Infrastructure. For avoidance of doubt, if the Infrastructure is hereafter expanded in connection with the development or improvement of the KPC Parcels as contemplated under this Paragraph 5(a), then the Water Company shall be entitled to ownership of (and shall receive easements as provided for in this Paragraph 5(a) for) the waterlines, pipes and other components of the Infrastructure up to the meters or shut-off valve, whichever is closer to the residence(s) constructed on the individual lots created by KPC on the KPC Parcels, and the owners of the individual lots shall own all waterlines, pipes and other equipment from such meter or shut-off valve. For purposes of this Agreement, the “Infrastructure” shall include the waterlines, pipes and other equipment owned by the Water Company, but not the waterlines, pipes or equipment owned by the individual lot owners. As used herein, “Subdivide” and “Subdivision” refer to the act of legally dividing or parcelizing a parcel of land (whether pursuant to the Subdivision Ordinance (Chapter 9, Kauai County Code), the Condominium Property Act (Chapter 514A, Hawaii Revised Statutes) or otherwise).

(b) Without limiting the terms of Paragraph 5(a) above, KPC (or, if there is more than one owner of the KPC Parcels, the owner(s) of the land affected by Easement A) shall have the right to terminate Easement A by granting to the Water Company alternate access to Section A of Easement W-7, which access may be (i) over Section B of Easement W-7, (ii) in a location described on Exhibit E hereto, or (iii) in another location reasonably convenient to the Water Company, provided that, in the case of this clause (iii), such access shall be of reasonably similar vehicle capacity, distance and road surface to Easement A. The alternate routes described in the foregoing clauses (i) and (ii) are hereby unconditionally and irrevocably approved by the Water Company. In the event KPC (or the applicable owner(s)) elects to terminate Easement A as provided in this Paragraph 5(b), (i) this Grant shall be amended as necessary to provide for the creation of an easement over the alternate access route on the terms contained in this Grant, and (ii) without limiting the unilateral termination rights of KPC described above in this Paragraph 5(b), at the request of KPC, the Water Company shall execute such documents as may be requested by KPC to evidence the vacation of Easement A as contemplated under this Paragraph 5(b). Upon satisfaction of the above conditions, as reasonably determined by the Water Company, KPC may file a notice of termination of Easement A in the Bureau of Conveyances of the State of Hawaii (the “Bureau”).

6. **Due Care and Diligence.**

(a) The Water Company will use due care and diligence in the inspection, construction, operation, maintenance, repair, replacement, improvement and enlargement of the Infrastructure, in keeping and maintaining the Infrastructure in good and safe condition and repair and in the exercise of its rights hereunder, and will at all times use commercially reasonable efforts to avoid, to the maximum extent practical, interfering with the quiet enjoyment of the KPC Parcels by KPC, its lessees and any other lawful occupants.
(b) KPC shall not take any action that will interfere with the Water Company's rights of access as provided herein (unless steps are taken by KPC to minimize such interference, such as, by way of example, providing the Water Company with, or making available to the Water Company, when needed, keys to locked gates) or the operation of the Infrastructure as a functioning potable water system designed to divert, carry, treat, store, meter and deliver water, excluding only temporary interruptions and interference as provided in Paragraph 5(a) above. Subject to the foregoing, KPC shall have the right to plant trees, bushes and other landscaping, and to construct and install fences, gates, pavement and other improvements (such landscaping and improvements being herein referred to collectively as the "Improvements") on the Non-Exclusive Easement Area, provided that the same shall not interfere with the operation of the Infrastructure as a functioning potable water system or adversely affect the quantity or quality of water produced by the Infrastructure. In the event that any Improvements interfere with the functioning of the potable water system or have an adverse effect on the quantity or quality of water produced by the Infrastructure, then, upon receipt of written notice from the Water Company, KPC shall take prompt action to remedy such problem. If KPC fails to do so within fifteen (15) days after receipt of such written notice (or such longer period as may be reasonably required to remedy such problem), then the Water Company may, but shall not be obligated, to remedy such problem using whatever commercially practical means are available under the circumstances. Notwithstanding the foregoing, in the event that any such Improvements prevent the Water Company from delivering water to any person or party, KPC shall take immediate action to remedy such problem upon receipt of written notice from the Water Company, and the Water Company may, but shall not be obligated, to remedy such problem and restore service if KPC fails to correct such problem in a timely and diligent manner. In the event that the Water Company is required to excavate or otherwise remove any Improvements in order to gain access to the Infrastructure, the Water Company shall not be responsible for replacing such Improvements, but shall, at the request of KPC, and at the sole cost of the Water Company, grass over the affected areas with a field or pasture grass acceptable to KPC. KPC shall have the right, at its sole expense, to replace any Improvements removed by the Water Company pursuant to this Paragraph 6(b).

c) Except as expressly provided herein with respect to the Easement Areas, nothing contained in this Grant shall be deemed to limit, interfere with or otherwise affect KPC's rights to, or use or occupancy of, the KPC Parcels.


(a) Subject to the last sentence of this Paragraph 7(a), KPC hereby agrees to indemnify and hold harmless the Water Company from any and all costs, losses and expenses arising out of any damage to the Infrastructure caused by KPC or its agents or employees, all to the extent not caused by the gross negligence of the Water Company or its Representatives, and from and against all damages, costs, counsel fees, expenses and liabilities incurred in or resulting from any such claim or demand or any action or proceeding brought thereon. If there is more than one owner of the KPC Parcels as contemplated under Paragraph 16(f) below, the indemnity provided herein shall be deemed given only by the respective owner who is directly responsible for the applicable damage which is the subject of the indemnification claim, and not by the other owners.
(b) The Water Company hereby agrees to indemnify and hold harmless KPC and its lessees and all persons lawfully occupying the KPC Parcels, either under lease from or by permission of KPC, from any and all claims and demands against them or any of them for wrongful death, loss or damage or injury to persons or property, including the claims of their respective agents and employees, arising out of the use or occupation of the Easement and/or the Easement Area and the construction, maintenance, repair, replacement or operation of the Infrastructure not caused by the gross negligence of the party to be indemnified or its agents or employees, and from and against all damages, costs, counsel fees, expenses and liabilities incurred in or resulting from any such claim or demand or any action or proceeding brought thereon.

(c) The Water Company shall, at the Water Company's expense, secure and keep in force a "broad form" commercial general liability insurance and property damage policy covering the Easement Area, insuring the Water Company, and naming KPC and its partners, members, employees, contractors, agents and lenders (collectively, "KPC Parties") as additional named insureds, against any liability arising out of the ownership, use, or maintenance of the Infrastructure or the Easement Area. The minimum limit of coverage of such policy shall be in the amount of not less than Five Million Dollars ($5,000,000.00) for injury or death of one person in any one accident or occurrence and in the amount of not less than Five Million Dollars ($5,000,000.00) for injury or death of more than one person in any one accident or occurrence, shall include an extended liability endorsement providing contractual liability coverage (which shall include coverage for the Water Company's indemnification obligations in this Grant), and shall contain a severability of interest clause or a cross liability endorsement. Such insurance shall further insure KPC and the Water Company against liability for property damage of at least Three Million Dollars ($3,000,000.00). KPC may from time to time require reasonable increases in any such limits if KPC believes that additional coverage is reasonably necessary; provided that KPC may only require such increase if other water companies similar in size to the Water Company ("Comparable Water Companies") are generally maintaining policies with higher policy amounts. The limit of any insurance shall not limit the liability of the Water Company hereunder. No policy maintained by the Water Company shall contain a deductible which is higher than the deductibles generally maintained by Comparable Water Companies. No policy shall be cancelable or subject to reduction of coverage without thirty (30) days' prior written notice to KPC. Such policies of insurance shall be issued as primary policies and not contributing with or in excess of coverage that KPC may carry, by an insurance company authorized to do business in the State of Hawaii for the issuance of such type of insurance coverage and rated A:XIJI or better in Best's Key Rating Guide if available on commercially reasonable terms.

(d) The Water Company shall deliver to KPC certificates of insurance and true and complete copies of any and all endorsements required herein for all insurance required to be maintained by the Water Company hereunder at the time of execution of this Grant by the Water Company. The Water Company shall, at least thirty (30) days prior to expiration of each policy, furnish KPC with certificates of renewal or "binders" thereof. Each certificate shall expressly provide that such policies shall not be cancelable or otherwise subject to modification except after thirty (30) days' prior written notice to KPC and the other parties named as additional insureds as required in this Grant. If for any reason the Water Company fails to obtain and maintain in full force and effect the insurance required under Paragraph 7(c) above, then...
KPC shall have the right to obtain such insurance on behalf of and at the sole cost of the Water Company, and the Water Company shall immediately reimburse KPC upon demand for the premiums and other costs incurred by KPC in connection with the issuance of such insurance.

8. **Condemnation.** If the premises affected by this Easement shall be taken or condemned in whole or in part by any authority having the power of eminent domain, compensation and damages awarded on account of the condemnation of taking of the fee encumbered by the Easement shall be payable to the fee owner of the premises so taken. The grantee of the Easement rights may claim and recover only from the condemning authority compensation and damages on account of the condemnation or taking of grantee’s easement rights and improvements, fixtures and other personal property.

9. **Mortgagee Protection.** All restrictions and other provisions herein contained shall be deemed subject and subordinate to all mortgages and deeds of trust now or hereafter executed upon the KPC Parcels or any portion thereof, and none of said restrictions shall supersede or in any way reduce the security or affect the validity of any such mortgage or deed of trust; provided, however, that if all or a portion of the KPC Parcels are sold under a foreclosure of any mortgage or under the provisions of any deed of trust, any purchaser at such sale, including, without limitation, the lender, and the successors and assigns of such purchaser, shall hold any and all property so purchased subject to all of the restrictions and other provisions of this Grant. The foregoing provision shall also apply to a deed in lieu of foreclosure and to the transferee of the lender after such deed in lieu.

10. **Leases.** This Grant, the Easement and the rights of the parties hereunder shall be and remain prior and superior to all leases now or hereafter affecting the KPC Parcels or any portion thereof, and to all renewals, modifications, replacements and extensions of such leases. This Paragraph 10 shall be self-operative and no further instrument of subordination shall be required; provided, however, that KPC shall, at the request of the Water Company, request any tenant of KPC designated by the Water Company to promptly execute, acknowledge and deliver any reasonable instrument that the Water Company may reasonably request to evidence such subordination.

11. **Potable Water Parcels.**

(a) KPC shall have the right, but not the obligation, to Subdivide or otherwise create as separate legal parcels all or any portion of the Easement Area (or, if required by the County of Kauai (the “County”) or any other governmental agency (collectively, “Governmental Agencies”) in connection with the Subdivision or other creation of the legal parcels, an area greater in size than the applicable portions of the Easement Area) (collectively, the “Potable Water Parcels”). If KPC elects to create the Potable Water Parcels, the Water Company and Cornerstone Hawaii Holdings LLC, a Colorado limited liability company (“CHH”), shall cooperate with KPC and take all actions requested by Governmental Agencies or reasonably requested by KPC to facilitate the creation of the Potable Water Parcels, including, without limitation, the execution of subdivision maps and other documents.

(b) Upon the creation of the Potable Water Parcels, KPC shall have the right, but not the obligation, to convey fee simple title to any or all of the Potable Water Parcels to the
Water Company. The managers and members of the Water Company shall take any and all actions necessary to cause the Water Company to (i) cooperate with KPC in the Subdivision and creation of the Potable Water Parcels, including, without limitation, executing such consents to the Subdivision and creation of the Potable Water Parcels as may be required by Governmental Agencies, and (ii) if requested by KPC, accept the grant from KPC of fee simple title to the applicable Potable Water Parcel(s), provided that there are no deed of trust or mortgage liens on such Potable Water Parcel(s), nor any encumbrances, covenants, restrictions, conditions or declarations of record that may reasonably and foreseeably interfere with the operations of the Water Company, that will not be released or reconveyed concurrently with the conveyance of such Potable Water Parcel(s) to the Water Company. The Water Company shall be responsible following such conveyance for the payment of property taxes and assessments and other governmental and quasi-governmental charges assessed against such Potable Water Parcel(s) and accruing after the date of the conveyance.

(c) If KPC conveys the Potable Water Parcels to the Water Company, then concurrently with or promptly following such conveyance, KPC and the Water Company shall record such instruments as shall be necessary to vacate or terminate the Easement (insofar as the Easement affects the Potable Water Parcels so conveyed to the Water Company), and KPC shall have no further obligations of any nature whatsoever under this Grant with respect to or arising out of the Potable Water Parcels so conveyed (but KPC shall at all times retain its rights under Paragraph 4 above).

(d) The Potable Water Parcel(s) shall be conveyed to the Water Company, if at all, pursuant to a quitclaim deed (i) which imposes restrictions on the uses to which the Potable Water Parcel(s) may be put after the date of conveyance, such that the Potable Water Parcel(s) may only be used after the conveyance for the uses which were in effect immediately prior to the conveyance (the "Permitted Uses"), and (ii) which contains a right of reversion in favor of KPC such that, if the Water Company shall ever fail or cease to use such Potable Water Parcel(s) for the Permitted Uses, then fee simple title to such Potable Water Parcel(s) shall automatically revert to KPC.

(e) The Water Company and Kealia Makai Holdings LLC, a Delaware limited liability company, shall be jointly and severally responsible and liable for the payment of all reasonable costs incurred in connection with the Subdivision and grant of the Potable Water Parcels, including, without limitation, all surveying and mapping fees.

12. Subdivision of KPC Parcels. If, at any time, KPC elects to Subdivide all or any portion of the KPC Parcels, then the managers and members of the Water Company shall take any and all actions necessary to cause the Water Company to cooperate with KPC in such Subdivision (at no cost or expense to the Water Company), including, without limitation, executing such consents to the Subdivision as may be required by Governmental Agencies.

13. Reduction of KPC Parcels. If KPC conveys a portion or portions of the KPC Parcels that do not include any of the Exclusive Easement Areas or the Non-Exclusive Easement Areas (the portion that is the subject of such Transfer herein referred to as the "Transferred Portion"), then the Water Company shall execute (and acknowledge so as to be in recordable form) a confirmatory certificate (a "Certificate"), in such form reasonably acceptable to the Water
Company, confirming that the Transferred Portion described in the Certificate is no longer part of the KPC Parcels, and that the owner and all future owners of such Transferred Portion shall have no rights or obligations under this Grant. From and after the execution of the Certificate, the portion or portions of the KPC Parcels that are the subject thereof shall no longer be subject to this Grant.

14. **KPC’s Right to Perform the Water Company’s Covenants.** In the event the Water Company fails to perform any of its covenants or obligations under this Grant (including, without limitation, the covenants and obligations set forth in Paragraphs 2(b) and 2(e) above) for a period of fifteen (15) days after receipt of written notice of such failure (except in the case of an emergency, in which event no notice shall be required), KPC, to the extent not prohibited by Law, shall have the right to perform such obligations at the Water Company’s cost, and KPC shall have no responsibility or liability for any damage to or destruction of the Water Company’s property or assets resulting therefrom, except for any damage or destruction resulting from the gross negligence or willful misconduct of KPC.

15. **KPC Owners’ Association.** In the event that the KPC Parcels shall be Subdivided or parcelized or otherwise sold or conveyed such that there shall be more than three (3) owners of the KPC Parcels, then KPC and the other owners shall form an owners’ association or other body which shall have the authority to exercise the rights and make the elections provided to KPC under the following provisions of this Grant:

(a) Paragraph 2(d) (with respect to the access rights granted to KPC in the first sentence of said Paragraph 2(d));

(b) Paragraph 3(b) (as to the retention of keys for the locked fences around the perimeter of the Exclusive Easement Area);

(c) Paragraph 7(c) (with respect to the rights to require increases in insurance coverages);

(d) Paragraph 7(d) (as to the receipt of items required to be delivered to KPC pursuant to said Paragraph 7(d));

(e) Paragraph 14 (with respect to the exercise of rights conferred upon KPC pursuant to said Paragraph 14); and

(f) Paragraph 16(h) (as to the approval of assignment and assumption documentation).

Notwithstanding the foregoing, in the event that KPC shall hereafter elect to convey the KPC Parcels to one or more legal entities controlled directly by KPC, then such entities shall not be deemed separate owners for purposes of this Paragraph 15 for so long as KPC directly controls such entities. For purposes of this Grant, “control” shall mean the ownership of a majority of the voting interests in such entity and the right to elect a majority of the managers, directors, partners or other similar fiduciaries that govern such entity. KPC shall provide written notice to the
Water Company prior to transferring a KPC Parcel to any such entity, and KPC and its owners shall certify to the Water Company in writing that KPC controls such entity.


(a) The Water Company hereby acknowledges and agrees that it has no right or interest of any nature whatsoever in or to the KPC Parcels, except for its interest in the Easements as created and granted by this Grant.

(b) KPC hereby acknowledges and agrees that it has no ownership right or interest in or to the Infrastructure.

(c) This Grant contains the final and entire agreement between the parties hereto with respect to the subject matter hereof and no party shall be bound by any liens, conditions, statement or representations, oral or written, which are not expressly described herein.

(d) Any subsequent amendment to this Grant shall be valid only if executed in writing by the parties, or their successors, to this Grant. As used in this Grant, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

(e) Subject to Paragraph 16(h) below, this Grant shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, and shall run with the land and properties burdened and benefited hereby.

(f) The term “KPC” as used in this Grant means, from time to time, the then current owner(s) of the KPC Parcels, so that, in the event of any sale of the KPC Parcels, KPC shall be and hereby is entirely freed and relieved of all covenants and obligations of KPC hereunder with respect to portions of the KPC Parcels so sold, and it shall be deemed and construed, without further agreement between the parties and the purchaser at any such sale, that the purchaser has assumed and agreed to carry out any and all obligations of KPC hereunder with respect to the portions of the KPC Parcels acquired by such purchaser.

(g) The provisions of this Grant shall be deemed to be cumulative. No provision of this Grant shall be deemed to be a limitation of or to exclude any other provision hereof, or any right to any remedy provided by law unless otherwise expressly stated. The captions of this Grant are inserted only for the purpose of convenient reference and in no way define, limit or prescribe the scope or intent of this Grant, or any part hereof.

(h) The Water Company may assign its rights and obligations hereunder, in whole but not in part, to any single person or entity which acquires all or substantially all of the Infrastructure, provided that the assignee assumes in writing, in a form reasonably acceptable to KPC, all obligations of the Water Company hereunder arising from and after the date of such assignment. Such assignment shall be in recordable form and shall be recorded at the Bureau. The Water Company shall notify KPC in writing in advance of making any such assignment. As a condition precedent to the effectiveness of any such assignment, the Water Company shall provide a written notice to the assignee of, and the assignee shall acknowledge and agree to be
bound, by the Water Service Agreement by and between the Water Company and KPC, dated of even date herewith (the “Water Service Agreement”). In the event of any assignment of the Water Company’s rights and obligations hereunder, the assignee shall be considered the “Water Company” for all purposes hereunder, and the Water Company named herein shall be and hereby is entirely freed and relieved of all covenants and obligations of the Water Company hereunder arising from and after the date of such assignment, provided that the assignee assumes and agrees, in writing, to carry out any and all obligations of the Water Company hereunder and under the Water Service Agreement.

(i) Without limiting the terms of Paragraph 16(h) above, the Water Company’s rights and obligations hereunder shall at all times be held by the same Person who is the obligor under the Water Service Agreement. Any assignment or purported assignment of this Agreement or of the Infrastructure without a concurrent transfer and assignment to the same assignee of the obligations of the obligor under the Water Service Agreement shall be void and of no force or effect.

IN WITNESS WHEREOF, the undersigned has hereunto set its hand and seal the day and year first written above.

KPC: KEALIA PLANTATION COMPANY, LLC,
a California limited liability company

By: [signature]
   Justin Hughes
   Manager

WATER COMPANY: KEALIA WATER COMPANY HOLDINGS LLC,
a Delaware limited liability company

By: Cornerstone Hawaii Holdings LLC,
a Colorado limited liability company,
   Manager

By: [signature]
   Thomas D. McCloskey, Jr.
   Manager
STATE OF California

COUNTY OF San Francisco

On December 31, 2004 before me, Rita C. Pease, Notary Public, Name, Title of Officer

personally appeared Justin Hughes, Name(s) of Signer(s)

☐ personally known to me -OR- ☑ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[Signature of Notary]

RITA C. PEASE
Commission # 1288468
Notary Public - California
San Francisco County
My Comm. Expires Jan 23, 2005
bound, by the Water Service Agreement by and between the Water Company and KPC, dated of even date herewith (the “Water Service Agreement”). In the event of any assignment of the Water Company’s rights and obligations hereunder, the assignee shall be considered the “Water Company” for all purposes hereunder, and the Water Company named herein shall be and hereby is entirely freed and relieved of all covenants and obligations of the Water Company hereunder arising from and after the date of such assignment, provided that the assignee assumes and agrees, in writing, to carry out any and all obligations of the Water Company hereunder and under the Water Service Agreement.

(i) Without limiting the terms of Paragraph 16(h) above, the Water Company’s rights and obligations hereunder shall at all times be held by the same Person who is the obligor under the Water Service Agreement. Any assignment or purported assignment of this Agreement or of the Infrastructure without a concurrent transfer and assignment to the same assignee of the obligations of the obligor under the Water Service Agreement shall be void and of no force or effect.

IN WITNESS WHEREOF, the undersigned has hereunto set its hand and seal the day and year first written above.

KPC: KEALIA PLANTATION COMPANY, LLC,
a California limited liability company

By: __________________________
    Justin Hughes
    Manager

WATER COMPANY: KEALIA WATER COMPANY HOLDINGS LLC,
a Delaware limited liability company

By: Cornerstone Hawaii Holdings LLC,
a Colorado limited liability company,
    Manager

By: __________________________
    Thomas D. McCloskey, Jr.
    Manager
The undersigned hereby execute this Grant for the purpose of acknowledging and agreeing to the terms of Paragraph 11 above.

CORNERSTONE HAWAII HOLDINGS LLC,
a Colorado limited liability company

By: ______________________________

Thomas P. McCloskey, Jr.
Manager

KEALIA MAKA‘I HOLDINGS LLC,
a Delaware limited liability company

By: ______________________________

Thomas D. McCloskey, Jr.
Manager
STATE OF COLORADO

COUNTY OF PITELIN

On this 22ND day of DECEMBER, 2004, before me personally appeared Thomas D. McCloskey, Jr., to me personally known as the Manager of Cornerstone Hawaii Holdings, LLC, being by me duly sworn or affirmed, did say that he executed the foregoing instrument as his free act and deed, in the capacity shown, having been duly authorized to execute such instrument in such capacity.

Name: Peggy LaSalle
Notary Public, State of Colorado

My commission expires: 6-9-05
EXHIBIT A
TO GRANT OF EASEMENTS

KPC MARKETABLE TITLE PARCELS

-FIRST- TMK: (4) 4-7-003-006

ALL of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi) situate, lying and being at Kealia, Kawaihau, Island and County of Kauai, State of Hawaii, being LOT A, and thus bounded and described as per survey of James R. Thompson, Land Surveyor, with Walter P. Thompson, Inc., dated August 4, 2005, to-wit:

Beginning at the south corner of this parcel of land, the same being the north corner of the intersection of Kealia Road (Government Road) and Kuhio Highway Federal Aid Project No. F-31(1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 18,827.66 feet south and 8,284.02 feet east and thence running by azimuths measured clockwise from true South:

<table>
<thead>
<tr>
<th>Azimuth</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 162° 10'</td>
<td>95.38 feet along the east side of Kealia Road (Government Road); Thence along the east side of Kealia Road (Government Road) on a curve to the left with a radius of 920.00 feet, the chord azimuth and distance being</td>
</tr>
<tr>
<td>2. 159° 50'</td>
<td>74.91 feet;</td>
</tr>
<tr>
<td>3. 157° 30'</td>
<td>403.00 feet along the east side of Kealia Road (Government Road); Thence along the east side of Kealia Road (Government Road) on a curve to the right with a radius of 240.00 feet, the chord azimuth and distance being</td>
</tr>
<tr>
<td>4. 177° 59'</td>
<td>167.97 feet;</td>
</tr>
<tr>
<td>5. 198° 28'</td>
<td>22.00 feet along the east side of Kealia Road (Government Road) to the centerline of a drainage ditch;</td>
</tr>
<tr>
<td>Number</td>
<td>Direction</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>6.</td>
<td>286° 18'</td>
</tr>
<tr>
<td>7.</td>
<td>315° 16'</td>
</tr>
<tr>
<td>8.</td>
<td>18° 04' 30''</td>
</tr>
<tr>
<td>9.</td>
<td>288° 04' 30''</td>
</tr>
<tr>
<td>10.</td>
<td>18° 04' 30''</td>
</tr>
<tr>
<td>11.</td>
<td>288° 04' 30''</td>
</tr>
<tr>
<td>12.</td>
<td>18° 04' 30''</td>
</tr>
</tbody>
</table>

feet along the centerline of a drainage ditch along Lot B, along the remainder of R. P. 5680, L. C. Aw. 11216, Ap. 6 to Kekauonohi;

feet along the centerline of a drainage ditch along Lot B, along the remainder of R. P. 5680, L. C. Aw. 11216, Ap. 6 to Kekauonohi to the westerly side of Kuhio Highway (F.A.P. No. F-31(1));

feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1));

feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1));

feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1));

feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1));

feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1)) to the point of beginning and containing an area of 3.199 acres, more or less.

TOGETHER WITH easements for Industrial Track crossing, trucking and other means of vehicular transportation over and across Kauai Belt Road, being Easements 1 and 2, as shown on the Right-of-Way Map of the Kauai Belt Road, Federal Aid Project No. F 31 (1), filed in the Office of the Superintendent of Public Works of the State of Hawaii; as reserved in that certain instrument dated August 29, 1955, recorded in Liber 3015 at Page 326, said easements being more particularly described as follows:

(A) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 1, being a strip of land 20.00 feet wide, and extending
for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "Kikoo" being 18,892.75 feet south and 8,346.93 feet east, thence running by azimuths measured clockwise from true South:

1. On a curve to the left with a radius of 140.00 feet, the chord azimuth and distance being

\[
144° 56' 40'' \quad 50.00 \text{ feet;}
\]

2. \(134° 39' 30'' \quad 44.73 \text{ feet and containing an area of 1900 square feet.}\)

(B) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 2, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "Kikoo" being 18,793.83 feet south and 8,379.22 feet east, thence running by azimuths measured clockwise from true South:

1. On a curve to the right with a radius of 180.00 feet, the chord azimuth and distance being

\[
83° 43' 10'' \quad 87.82 \text{ feet and containing an area of 1,774 square feet.}
\]
ALL of that certain parcel of land (being a portion of the land
described in and covered by Royal Patent Number 5680, Land Commission
Award Number 11216, Apana 6 to M. Kekauonohi) situate, lying and being
at Kealia, Kawaihau, Island and County of Kauai, State of Hawaii,
being LOT B, and thus bounded and described as per survey of James R.
Thompson, Land Surveyor, with Walter P. Thompson, Inc., dated August
4, 2005, to-wit:

Beginning at the northeast corner of this parcel of land, the same
being the south corner of Lot 16, File Plan 505, Kealia Town Tract,
Block A and on the westerly side of Kuhio Highway, Federal Aid Project
No. F-31(1), the coordinates of said point of beginning referred to
Government Survey Triangulation Station "KIKOO" being 17,815.04 feet
south and 8,582.95 feet east and thence running by azimuths measured
clockwise from true South:

1. 18° 04' 30" 127.76 feet along the westerly side of
   Kuhio Highway (F.A.P. No. F-31(1);

2. 108° 04' 30" 10.00 feet along the westerly side of
   Kuhio Highway (F.A.P. No. F-31(1);

3. 18° 04' 30" 377.25 feet along the westerly side of
   Kuhio Highway (F.A.P. No. F-31(1);

4. 135° 16' 172.12 feet along the centerline of a
   drainage ditch, along Lot A,
   along the remainder of R. P.
   5680, L. C. Aw. 11216, Ap. 6 to
   M. Kekauonohi;

5. 106° 18' 229.00 feet along the centerline of a
   drainage ditch, along Lot A,
   along the remainder of R. P.
   5680, L. C. Aw. 11216, Ap. 6 to
   M. Kekauonohi;

6. 198° 28' 117.00 feet along the east side of
   Kealia Road (Government Road);

   Thence along the east side of
   Kealia Road (Government Road) on
   a curve to the left with a radius of 290.00 feet, the chord
   azimuth and distance being

7. 168° 38' 288.54 feet;
8. 138° 48' 83.00 feet along the east side of Kealia Road (Government Road); Thence along the east side of Kealia Road (Government Road) on a curve to the right with a radius of 460.00 feet, the chord azimuth and distance being

9. 159° 15' 321.44 feet;  

10. 179° 42' 157.00 feet along the east side of Kealia Road (Government Road); Thence along the east side of Kealia Road (Government Road) on a curve to the left with a radius of 500.00 feet, the chord azimuth and distance being

11. 168° 36' 192.52 feet;  

12. 157° 30' 112.85 feet along the east side of Kealia Road (Government Road); Thence along the east side of Kealia Road (Government Road) on a curve to the right with a radius of 780.00 feet, the chord azimuth and distance being

13. 167° 22' 30" 267.54 feet;  

14. 267° 15' 4.46 feet along the east side of Kealia Road (Government Road);  

15. 349° 34' 69.11 feet along Lot 1, File Plan 505, Kealia Town Tract, Block A;  

16. 336° 42' 217.42 feet along Lots 2, 3 and 4, File Plan 505, Kealia Town Tract, Block A;  

17. 315° 44' 53.79 feet along Lot 4, File Plan 505, Kealia Town Tract, Block A;  

18. 343° 30' 101.02 feet along Lots 4 and 5, File Plan 505, Kealia Town Tract, Block A;
19. 354° 03' 99.82 feet along Lot 5, File Plan 505, Kealia Town Tract, Block A;
20. 3° 29' 163.05 feet along Lot 6, File Plan 505, Kealia Town Tract, Block A;
21. 338° 56' 30" 193.15 feet along Lots 7 and 8, File Plan 505, Kealia Town Tract, Block A;
22. 305° 25' 30" 121.26 feet along Lots 9 and 10, File Plan 505, Kealia Town Tract, Block A;
23. 271° 37' 30" 157.50 feet along Lots 10, 11 and a 10-ft. wide drainage right-of-way, File Plan 505, Kealia Town Tract, Block A;
24. 324° 54' 115.41 feet along Lots 11 and 12, File Plan 505, Kealia Town Tract, Block A;
25. 300° 45' 319.25 feet along Lots 12, 13, 14, 15 and 16, File Plan 505, Kealia Town Tract, Block A to the point of beginning and containing an area of 6.523 acres, more or less.

Said above described parcel of land having been acquired by KEALIA PLANTATION COMPANY, LLC, a California limited liability company, as follows:

By DEED of KEALIA ISLAND SCHOOL HOLDINGS LLC, a Delaware limited liability company and CORNERSTONE HAWAII HOLDINGS LLC, a Colorado limited liability company, dated April 23, 2001, recorded as Document No. 2001-097098; and

By DEED of CORNERSTONE HAWAII HOLDINGS LLC, a Colorado limited liability company, dated April 23, 2001, recorded as Document No. 2001-097100.
ALL that certain piece or parcel of land (being a portion of Royal Patent 5680, Land Commission Award 11216, Apana 6 to M. Kekauonohi and all of the following: Royal Patent 6905, Land Commission Award 10148, Apanas 1 and 2 to Mamaki, Royal Patent 6386, Land Commission Award 8834, Apanas 1 and 2 to Kalawala, Royal Patent 6801, Land Commission Award 10906, Apanas 1 and 2 to Umiumi, Royal Patent 6387, Land Commission Award 1980, Apanas 1 and 2 to Puali, Royal Patent 6919, Land Commission Award 7966 to Keaonui, Royal Patent 6686, Land Commission Award 8060 to Huliai, Royal Patent 7361, Land Commission Award 10628, Apanas 1 and 2 to Puhi, Royal Patent 7610, Land Commission Award 10907, Apanas 1 and 2 to Naumiumi, Royal Patent 7360, Land Commission Award 8833, Apanas 1 and 2 to Kilaia and Royal Patent 6735, Land Commission Award 10149, Apana 1 to Makuahele, Royal Patent 8357, Land Commission Award 8842, Apanas 1 and 2 to Kaawapupuole, a portion of Royal Patent 3919, Land Commission Award 3413-B to Kaaki and being a portion of the Certificate of Boundaries No. 1) situate, lying and being at Kealia, Kawaihau, Island and County of Kauai, State of Hawaii, being LOT D, and containing a gross area of 935.451 acres, more or less, as per survey of James R. Thompson, Land Surveyor, with Walter P. Thompson, Inc., dated August 4, 2005.

Beginning at the south corner of this parcel of land, the same being the intersection of Kuhio Highway, Federal Aid Project No. F 12(20) and the northerly bank of the Kapaa River, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKO" being 20,419.47 feet South and 7,743.46 feet East and thence running by azimuths measured clockwise from true South:

<table>
<thead>
<tr>
<th>Course</th>
<th>Azimuth (°')</th>
<th>Distance (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>79° 00'</td>
<td>1058.00 feet</td>
</tr>
<tr>
<td>2.</td>
<td>163° 30'</td>
<td>986.50 feet</td>
</tr>
<tr>
<td>3.</td>
<td>160° 43'</td>
<td>855.00 feet</td>
</tr>
<tr>
<td>4.</td>
<td>63° 54'</td>
<td>956.50 feet</td>
</tr>
<tr>
<td>5.</td>
<td>119° 42'</td>
<td>1271.00 feet</td>
</tr>
<tr>
<td>6.</td>
<td>134° 00'</td>
<td>1037.50 feet</td>
</tr>
<tr>
<td>7.</td>
<td>144° 38'</td>
<td>952.80 feet</td>
</tr>
<tr>
<td>8.</td>
<td>147° 39'</td>
<td>487.24 feet</td>
</tr>
</tbody>
</table>

Along the northerly bank of the Kapaa River in all its meandering for the next eight (8) courses, the direct azimuth and distance between point being
9. 240° 04' 17.33 feet along Lot 3-B;
10. 149° 19' 152.19 feet along Lot 3-B;
11. 143° 43' 90.00 feet along Lot 3-B;
12. 132° 33' 120.00 feet along Lot 3-B;
13. 127° 30' 370.48 feet along Lots 3-B and 3-A;
14. 213° 35' 44.96 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
15. 142° 43' 30" 25.41 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
16. 146° 52' 143.88 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
17. 123° 07' 116.60 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
18. 120° 07' 97.02 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
19. 113° 07' 111.54 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
20. 105° 37' 128.04 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
21. 99° 37' 71.28 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
22. 58° 02' 166.32 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
23. 51° 47' 66.00 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
<table>
<thead>
<tr>
<th></th>
<th>Azimuth</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>40° 07'</td>
<td>137.90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;</td>
</tr>
<tr>
<td>25.</td>
<td>23° 37'</td>
<td>312.59</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi to the centerline of the Kapaa River and passing over a pipe at 271.00 feet;</td>
</tr>
<tr>
<td>26.</td>
<td>101° 43'</td>
<td>151.27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along the centerline of the Kapaa River and along the Kealia and Kapaa boundary;</td>
</tr>
<tr>
<td>27.</td>
<td>86° 53'</td>
<td>209.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along the centerline of the Kapaa River and along the Kealia and Kapaa boundary;</td>
</tr>
<tr>
<td>28.</td>
<td>43° 16'</td>
<td>165.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along the centerline of the Kapaa River and along the Kealia and Kapaa boundary to an existing concrete crossing;</td>
</tr>
<tr>
<td>29.</td>
<td>99° 45'</td>
<td>30.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along the Kealia and Kapaa boundary and along Government Land;</td>
</tr>
<tr>
<td>30.</td>
<td>64° 30'</td>
<td>238.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along the Kealia and Kapaa boundary and along Government Land;</td>
</tr>
<tr>
<td>31.</td>
<td>41° 30'</td>
<td>675.54</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along the Kealia and Kapaa boundary and along Government Land and crossing over a paved road;</td>
</tr>
<tr>
<td>32.</td>
<td>136° 30'</td>
<td>26.44</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi and crossing a paved road; Thence along Roadway Parcel &quot;C&quot; on a curve to the right with a radius of 85.00 feet, the chord azimuth and distance being</td>
</tr>
<tr>
<td>33.</td>
<td>92° 05'</td>
<td>121.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet</td>
</tr>
<tr>
<td>34.</td>
<td>137° 40'</td>
<td>191.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feet along Roadway Parcel &quot;C&quot;; Thence along Roadway Parcel &quot;C&quot; on a curve to the left with a</td>
</tr>
</tbody>
</table>
radius of 290.00 feet, the chord azimuth and distance being

<table>
<thead>
<tr>
<th></th>
<th>Azimuth</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.</td>
<td>124° 01'</td>
<td>136.87</td>
</tr>
<tr>
<td>36.</td>
<td>110° 22'</td>
<td>64.55</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>119° 11'</td>
<td>148.68</td>
</tr>
<tr>
<td>38.</td>
<td>128° 00'</td>
<td>66.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>155° 02' 30&quot;</td>
<td>122.75</td>
</tr>
<tr>
<td>40.</td>
<td>182° 05'</td>
<td>171.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>166° 49' 30&quot;</td>
<td>402.65</td>
</tr>
<tr>
<td>42.</td>
<td>51° 34'</td>
<td>35.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>169° 20'</td>
<td>295.99</td>
</tr>
<tr>
<td>44.</td>
<td>187° 06'</td>
<td>87.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45.</td>
<td>185° 37'</td>
<td>104.32</td>
</tr>
<tr>
<td>46.</td>
<td>184° 08'</td>
<td>68.44</td>
</tr>
<tr>
<td></td>
<td>Azimuth</td>
<td>Distance</td>
</tr>
<tr>
<td>---</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>47.</td>
<td>187° 54'</td>
<td>260.80</td>
</tr>
<tr>
<td>48.</td>
<td>191° 40'</td>
<td>172.77</td>
</tr>
<tr>
<td>49.</td>
<td>175° 35'</td>
<td>146.83</td>
</tr>
<tr>
<td>50.</td>
<td>159° 30'</td>
<td>50.51</td>
</tr>
<tr>
<td>51.</td>
<td>148° 35'</td>
<td>195.06</td>
</tr>
<tr>
<td>52.</td>
<td>137° 40'</td>
<td>57.88</td>
</tr>
<tr>
<td>53.</td>
<td>179° 55'</td>
<td>80.68</td>
</tr>
<tr>
<td>54.</td>
<td>222° 10'</td>
<td>108.98</td>
</tr>
<tr>
<td>55.</td>
<td>199° 10'</td>
<td>285.23</td>
</tr>
<tr>
<td>56.</td>
<td>176° 10'</td>
<td>52.26</td>
</tr>
<tr>
<td>57.</td>
<td>200° 43'</td>
<td>153.73</td>
</tr>
</tbody>
</table>

Thence along Roadway Parcel "C" on a curve to the right with a radius of 1985.00 feet, the chord azimuth and distance being feet; thence along Roadway Parcel "C" on a curve to the left with a radius of 265.00 feet, the chord azimuth and distance being feet; thence along Roadway Parcel "C" on a curve to the left with a radius of 515.00 feet, the chord azimuth and distance being feet; thence along Roadway Parcel "C" on a curve to the right with a radius of 60.00 feet, the chord azimuth and distance being feet; thence along Roadway Parcel "C" on a curve to the left with a radius of 365.00 feet, the chord azimuth and distance being feet; thence along Roadway Parcel "C" on a curve to the right with a radius of 185.00 feet, the chord azimuth and distance being feet;
58. 225° 16' 204.44 feet along Roadway Parcel "C";
    Thence along Roadway Parcel "C" on a curve to the left with a
    radius of 465.00 feet, the chord azimuth and distance being

59. 208° 15' 272.04 feet;

60. 191° 15' 393.09 feet along Roadway Parcel "C";
    Thence along Roadway Parcel "C" on a curve to the right with a
    radius of 2185.00 feet, the chord azimuth and distance being

61. 198° 50' 576.70 feet;

62. 206° 25' 363.05 feet along Roadway Parcel "C";
    Thence along Roadway Parcel "C" on a curve to the left with a
    radius of 3015.00 feet, the chord azimuth and distance being

63. 202° 31' 410.13 feet;

64. 198° 37' 76.44 feet along Roadway Parcel "C";
    Thence along Roadway Parcel "C" on a curve to the left with a
    radius of 615.00 feet, the chord azimuth and distance being

65. 183° 53' 312.81 feet;

66. 169° 09' 93.15 feet along Roadway Parcel "C";
    Thence along Roadway Parcel "C" on a curve to the right with a
    radius of 985.00 feet, the chord azimuth and distance being

67. 176° 19' 30" 246.05 feet;

68. 183° 30' 62.40 feet along Roadway Parcel "C";
    Thence along Roadway Parcel "C" on a curve to the left with a
    radius of 1315.00 feet, the chord azimuth and distance being
69. 174° 36' 406.89 feet; 70. 165° 42' 491.64 feet along Roadway Parcel "C";
Thence along Roadway Parcel "C" on a curve to the right with a radius of 185.00 feet, the chord azimuth and distance being

71. 187° 16' 136.01 feet;
72. 208° 50' 124.64 feet along Roadway Parcel "C" to Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a radius of 30.00 feet, the radial azimuth at the point of curvature being 118° 50', the radial azimuth at the point of compound curvature being 222° 04' 56", the chord azimuth and distance being

73. 260° 27' 28" 47.04 feet;
Thence along Roadway Parcel "A" on a curve to the right with a radius of 180.00 feet, the radial azimuth at the point of compound curvature being 222° 04' 56", the radial azimuth at the point of reverse curvature being 240° 59' 02", the chord azimuth and distance being

74. 321° 32' 02" 59.12 feet;
Thence along Roadway Parcel "A" on a curve to the left with a radius of 520.00 feet, the radial azimuth at the point of reverse curvature being 60° 59' 02" the radial azimuth at the point of tangency being 31° 35', the chord azimuth and distance being

75. 316° 17' 01" 263.91 feet;
76. 301° 35' 106.04 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a radius of 1980.00 feet, the chord azimuth and distance being

77. 307° 23' 30"  400.76  feet;
78. 313° 12'     120.78  feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 1980.00 feet, the chord azimuth and distance being

79. 316° 36'     234.85  feet;
80. 320° 00'     400.66  feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 620.00 feet, the chord azimuth and distance being

81. 311° 26'     184.71  feet;
82. 302° 52'     157.68  feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 1330.00 feet, the chord azimuth and distance being

83. 308° 41'     269.58  feet;
84. 314° 30'     59.16   feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 1980.00 feet, the chord azimuth and distance being

85. 320° 04' 30"  384.71  feet along Roadway Parcel "A";
86. 325° 39'     172.06  feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 620.00 feet, the chord azimuth and distance being

87. 310° 47' 30"  317.97  feet;
88. 295° 56' 767.16 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the left with a radius of 10020.00 feet, the chord azimuth and distance being feet;
89. 294° 04' 652.78 feet along Roadway Parcel "A";
90. 292° 12' 35.63 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the right with a radius of 580.00 feet, the chord azimuth and distance being feet;
91. 306° 46' 291.75 feet along Roadway Parcel "A";
92. 321° 20' 252.22 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the left with a radius of 520.00 feet, the chord azimuth and distance being feet;
93. 311° 22' 30" 179.85 feet along Roadway Parcel "A";
94. 301° 25' 322.68 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the right with a radius of 680.00 feet, the chord azimuth and distance being feet;
95. 312° 12' 30" 254.64 feet along Roadway Parcel "A";
96. 323° 00' 167.22 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the left with a radius of 1020.00 feet, the chord azimuth and distance being feet;
97. 321° 03' 30" 69.12 feet along Roadway Parcel "A";
98. 319° 07' 290.14 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the right with a radius of 1180.00 feet, the chord azimuth and distance being
99. 324° 32' 222.78 feet;  
100. 329° 57' 165.80 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A" on a curve to the left with a radius of 1520.00 feet, the chord azimuth and distance being  
101. 318° 16' 30" 615.17 feet;  
102. 306° 36' 99.62 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A" on a curve to the right with a radius of 480.00 feet, the chord azimuth and distance being  
103. 313° 12' 30" 110.48 feet;  
104. 319° 49' 77.80 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A" on a curve to the right with a radius of 380.00 feet, the chord azimuth and distance being  
105. 335° 41' 207.78 feet;  
106. 351° 33' 15.86 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A" on a curve to the left with a radius of 495.00 feet, the chord azimuth and distance being  
107. 325° 32' 30" 434.12 feet;  
108. 299° 32' 376.71 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A" on a curve to the left with a radius of 420.00 feet, the chord azimuth and distance being  
109. 284° 42' 30" 214.93 feet;  
110. 269° 53' 28.19 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A" on a curve to the right with a
radius of 230.00 feet, the chord azimuth and distance being

111. 293° 18' 182.81 feet;
112. 316° 43' 159.07 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 395.00 feet, the chord azimuth and distance being

113. 296° 19' 275.37 feet;
114. 275° 55' 123.53 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a radius of 230.00 feet, the chord azimuth and distance being

115. 296° 11' 30" 159.40 feet;
116. 316° 28' 130.88 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 820.00 feet, the chord azimuth and distance being

117. 336° 51' 30" 125.44 feet;
118. 357° 15' 194.59 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 460.00 feet, the chord azimuth and distance being

119. 347° 22' 30" 281.26 feet;
120. 337° 30' 112.85 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a radius of 460.00 feet, the chord azimuth and distance being

121. 348° 36' 177.12 feet;
122. 359° 42' 157.00 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 500.00 feet, the chord azimuth and distance being

123. 339° 15' 349.39 feet;

124. 318° 48' 83.00 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 250.00 feet, the chord azimuth and distance being

125. 348° 38' 248.74 feet;

126. 18° 28' 139.00 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 280.00 feet, the chord azimuth and distance being

127. 357° 59' 195.96 feet;

128. 337° 30' 403.00 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 880.00 feet, the chord azimuth and distance being

129. 339° 50' 71.65 feet;

130. 342° 10' 150.62 feet along Roadway Parcel "A";

feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31[l]) and (F.A.P. No. F-12[20]);

131. 18° 04' 30'' 954.17 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);

132. 108° 04' 30'' 10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);

133. 18° 04' 30'' 150.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);

134. 288° 04' 30'' 10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);
feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);

340.00

25.61

152.61

feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);

to the point of beginning and containing a gross area of 935.451 acres.

EXCLUDING THEREFROM the following land and areas:

Royal Patent 7360, Land Commission Award 8833, Apana 1 to Kiaipa containing 0.220 acre.
Royal Patent 7360, Land Commission Award 8833, Apana 2 to Kiaipa containing 0.660 acre.
Royal Patent 6735, Land Commission Award 10149, Apana 1 to Makuahine containing an area of 1.00 acre.
Royal Patent 8357, Land Commission Award 8842, Apana 1 to Kaawapupuole containing an area of 0.590 acre.
Royal Patent 8357, Land Commission Award 8842, Apana 2 to Kaawapupuole containing an area of 0.400 acre.
Royal Patent 6387, Land Commission Award 1980, Apana 2 to Puali containing an area of 1.210 acres.
Royal Patent 7361, Land Commission Award 10628, Apana 1 to Puhi containing an area of 0.510 acre.
Royal Patent 7361, Land Commission Award 10628, Apana 2 to Puhi containing an area of 0.510 acre.
Royal Patent 6905, Land Commission Award 10148, Apana 1 to Mamaki containing an area of 0.510 acre.
Royal Patent 6905, Land Commission Award 10148, Apana 2 to Mamaki containing an area of 1.070 acre.

and leaving a net area of 928.771 acres.

BEING THE PREMISES ACQUIRED BY DEED

GRANTOR : KEALIA MAUKA HOLDINGS LLC, a Delaware limited liability company

GRANTEE : KEALIA PLANTATION COMPANY, LLC, a California limited liability company

DATED : April 23, 2001

RECORDED : Document No. 2001-097096

Subject to any and all liens and/or encumbrances of record.
ALL that certain piece or parcel of land (being all of Royal Patent 7149, Land Commission Award 10689 to Puukuakahi and Royal Patent 6814, Land Commission Award 10660 to Pakaa and portions of Royal Patent 5680, Land Commission Award 11216, Apana 6 to M. Kekauonohi, Grant 3158 to E. Krull and Certificate of Boundaries No. 1) situate, lying and being at Kealia, Kawaihau, Island and County of Kauai, State of Hawaii.

Beginning at the northeast corner of this parcel of land, the same being on the boundary of the lands of Kealia and Kamalomalo and on the westerly side of Kuhio Highway, Federal Aid Project No. F-31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,480.38 feet South and 9,951.24 feet East and thence running by azimuths measured clockwise from true South:

1. $340^\circ 51' 12''$ 324.50 feet;
2. $263^\circ 13' 10''$ 20.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);
3. $357^\circ 31'$ 591.95 feet;
4. $91^\circ 48' 50''$ 10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

Thence along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]) on a curve to the right with a radius of 3930.00 feet, the radial azimuth to the point of curvature being $258^\circ 29' 14''$ and to the point of tangency being $263^\circ 13' 10''$, the chord azimuth and distance being

1. $357^\circ 31'$ 591.95 feet;
2. $263^\circ 13' 10''$ 20.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);
3. $357^\circ 31'$ 591.95 feet;
4. $91^\circ 48' 50''$ 10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

Thence along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]) on a curve to the right with a radius of 3950.00 feet, the radial azimuth at the point of curvature being $263^\circ 13' 10''$ and at the point of tangency being $271^\circ 48' 50''$, the chord azimuth and distance being
F-31 (1) on a curve to the right with a radius of 3940.00 feet, the radial azimuth at the point of curvature being 271° 48' 50" and at the point of tangency being 280° 51', the chord azimuth and distance being

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<td>5.</td>
<td>6° 19' 55&quot;</td>
<td>620.73 feet;</td>
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<td>6.</td>
<td>10° 51'</td>
<td>317.79 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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<td>7.</td>
<td>280° 51'</td>
<td>20.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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<td>8.</td>
<td>10° 51'</td>
<td>1600.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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<td>9.</td>
<td>100° 51'</td>
<td>10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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<td>10.</td>
<td>10° 51'</td>
<td>450.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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<td>11.</td>
<td>100° 51'</td>
<td>20.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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<td>12.</td>
<td>10° 51'</td>
<td>400.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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<td>13.</td>
<td>280° 51'</td>
<td>10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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<td>14.</td>
<td>10° 51'</td>
<td>200.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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<tr>
<td>15.</td>
<td>280° 51'</td>
<td>10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 (1));</td>
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16.  $10^\circ 51'  582.76$
feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

Thence along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]) on a curve to the right with a radius of 5950.00 feet, the chord azimuth and distance being

17.  $14^\circ 27' 45''  749.80$
feet;

18.  $18^\circ 04' 30''  910.64$
feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31[1]);

19.  $108^\circ 04' 30''  20.00$
feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31[1]);

20.  $18^\circ 04' 30''  500.62$
feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31[1]);

21.  $120^\circ 45'  389.29$
feet along Kaao Road and Lots 17, 18, 19, 20 and 21, File Plan 505, Kealia Town Tract, Block A;

Thence along Lot 21, a 10-ft. wide drainage right-of-way, Lots 22, 23, 24, and a portion of a 40-ft. wide roadway, File Plan 505, Kealia Town Tract, Block A on a curve to the right with a radius of 280.00 feet, the chord azimuth and distance being

22.  $146^\circ 07' 30''  239.98$
feet;

23.  $171^\circ 30'  387.47$
feet along a 40-ft. wide roadway and Lots 25, 26, 27 and 28, File Plan 505, Kealia Town Tract, Block A;

Thence along Lots 28, 29, 30 and 31, File Plan 505, Kealia Town Tract, Block A on a curve to the left with a radius of 360.00 feet, the chord azimuth and distance being
24. 148° 30' 50" 281.17 feet;  
25. 215° 31' 40" 140.00 feet along Lot 36, File Plan  
505, Kealia Town Tract, Block A  
and along Hopoe Road;  
Thence along Hopoe Road on a  
curve to the left with a radius  
of 500.00 feet, the chord  
azimuth and distance being  
26. 123° 14' 09" 39.99 feet;  
27. 30° 56' 38" 10.00 feet along Hopoe Road;  
Thence along Hopoe Road on a  
curve to to the left with a  
radius of 490.00 feet, the chord  
azimuth and distance being  
28. 104° 28' 19" 277.88 feet;  
29. 88° 00' 2.57 feet along Hopoe Road;  
Thence along Hopoe Road on a  
curve to to the right with a  
radius of 25.00 feet, the chord  
azimuth and distance being  
30. 138° 16' 30" 38.46 feet;  
31. 98° 33' 30.00 feet along Roadway Parcel "A";  
32. 8° 33' 27.51 feet along Roadway Parcel "A";  
33. 136° 28' 173.31 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A"  
on a curve to the left with a  
radius of 270.00 feet, the chord  
azimuth and distance being  
34. 116° 11' 30" 187.12 feet;  
35. 95° 55' 123.53 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A"  
on a curve to the right with a  
radius of 355.00 feet, the chord  
azimuth and distance being  
36. 116° 19' 247.49 feet;
37. 136° 43' 159.07 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the left with a radius of 270.00 feet, the chord azimuth and distance being

38. 113° 18' 214.60 feet;

39. 89° 53' 28.19 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the right with a radius of 380.00 feet, the chord azimuth and distance being

40. 104° 42' 30" 194.46 feet;

41. 119° 32' 376.71 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the right with a radius of 455.00 feet, the chord azimuth and distance being

42. 145° 32' 30" 399.04 feet;

43. 171° 33' 15.86 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the left with a radius of 420.00 feet, the chord azimuth and distance being

44. 155° 41' 229.66 feet;

45. 139° 49' 77.80 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the left with a radius of 520.00 feet, the chord azimuth and distance being

46. 133° 12' 30" 119.69 feet;

47. 126° 36' 99.62 feet along Roadway Parcel "A";
   Thence along Roadway Parcel "A" on a curve to the right with a radius of 1480.00 feet, the chord azimuth and distance being
48. 138° 16' 30"  598.99 feet; feet along Roadway Parcel "A";

49. 149° 57'  165.80 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 1220.00 feet, the chord azimuth and distance being

50. 144° 32'  230.33 feet; feet along Roadway Parcel "A";

51. 139° 07'  290.14 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 980.00 feet, the chord azimuth and distance being

52. 141° 03' 30"  66.41 feet; feet along Roadway Parcel "A";

53. 143° 00'  167.22 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 720.00 feet, the chord azimuth and distance being

54. 132° 12' 30"  269.62 feet; feet along Roadway Parcel "A";

55. 121° 25'  322.68 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 480.00 feet, the chord azimuth and distance being

56. 131° 22' 30"  166.01 feet; feet along Roadway Parcel "A";

57. 141° 20'  252.22 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 620.00 feet, the chord and azimuth and distance being

58. 126° 46'  311.87 feet; feet along Roadway Parcel "A";

59. 112° 12'  35.63 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a
radius of 9980.00 feet, the chord azimuth and distance being feet:

60. 114° 04' 650.17 feet along Roadway Parcel "A";

61. 115° 56' 767.16 feet along Roadway Parcel "A"; Thence along Roadway Parcel "A" on a curve to the right with a radius of 580.00 feet, the chord azimuth and distance being feet;

62. 130° 47' 30" 297.46 feet along Roadway Parcel "A";

63. 145° 39' 172.06 feet along Roadway Parcel "A"; Thence along Roadway Parcel "A" on a curve to the left with a radius of 2020.00 feet, the chord azimuth and distance being feet;

64. 140° 04' 30" 392.48 feet along Roadway Parcel "A";

65. 134° 30' 59.16 feet along Roadway Parcel "A"; Thence along Roadway Parcel "A" on a curve to the left with a radius of 1370.00 feet, the chord azimuth and distance being feet;

66. 128° 41' 277.69 feet along Roadway Parcel "A";

67. 122° 52' 157.68 feet along Roadway Parcel "A"; Thence along Roadway Parcel "A" on a curve to the right with a radius of 580.00 feet, the chord azimuth and distance being feet;

68. 131° 26' 172.79 feet along Roadway Parcel "A";

69. 140° 00' 400.66 feet along Roadway Parcel "A"; Thence along Roadway Parcel "A" on a curve to the left with a radius of 2020.00 feet, the chord azimuth and distance being feet;

70. 136° 36' 239.60 feet along Roadway Parcel "A";

71. 133° 12' 120.78 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 2020.00 feet, the chord azimuth and distance being:

72. 127° 23' 30" 408.85 feet;

73. 121° 35' 106.04 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 480.00 feet, the radial azimuth at the point of curvature being 31° 35', the radial azimuth at the point of reverse curve being 60° 59' 02", the chord azimuth and distance being:

74. 136° 17' 01" 243.61 feet;

Thence along Roadway Parcel "A" on a curve to the left with a radius of 220.00 feet, the radial azimuth at the point of reverse curve being 240° 59' 02" and the radial azimuth at the point of reverse curve being 216° 44' 14", the chord azimuth and distance being:

75. 138° 51' 38" 92.41 feet;

Thence along Roadway Parcel "A" on a curve to the right with a radius of 30.00 feet, the radial azimuth at the point of reverse curve being 36° 44' 14" and the radial azimuth at the point of tangency being 118° 50', the chord azimuth and distance being:

76. 167° 47' 07" 39.40 feet;

77. 208° 50' 609.99 feet along Roadway Parcel "B";

Thence along Roadway Parcel "B" on a curve to the right with a radius of 1085.00 feet, the chord azimuth and distance being:

78. 216° 35' 292.62 feet;
79. 224° 20' 442.06 feet along Roadway Parcel "B"; Thence along Roadway Parcel "B" on a curve to the right with a radius of 1485.00 feet, the chord azimuth and distance being feet;

80. 228° 10' 198.56 feet along Roadway Parcel "B";

81. 232° 00' 79.21 feet along Roadway Parcel "B"; Thence along Roadway Parcel "B" on a curve to the left with a radius of 1015.00 feet, the chord azimuth and distance being feet;

82. 230° 17' 30" 60.52 feet along Roadway Parcel "B";

83. 228° 35' 212.26 feet along Roadway Parcel "B"; Thence along Roadway Parcel "B" on a curve to the right with a radius of 285.00 feet, the chord azimuth and distance being feet;

84. 247° 47' 30" 187.53 feet along Roadway Parcel "B";

85. 267° 00' 27.78 feet along Roadway Parcel "B"; Thence along Roadway Parcel "B" on a curve to the left with a radius of 565.00 feet, the chord azimuth and distance being feet;

86. 247° 34' 375.96 feet along Roadway Parcel "B";

87. 228° 08' 313.32 feet along Roadway Parcel "B";

88. 270° 19' 56.25 feet along the Government Land of Kamalomalo;

89. 265° 34' 635.30 feet along the Government Land of Kamalomalo;

90 287° 46' 205.50 feet along the Government Land of Kamalomalo;

91. 310° 40' 30" 1006.10 feet along the Government Land of Kamalomalo;
92. 255° 59' 30" 805.30 feet along the Government Land of Kamalomaloi;
93. 281° 50' 428.60 feet along the Government Land of Kamalomaloi;
94. 307° 57' 351.80 feet along the Government Land of Kamalomaloi;
95. 293° 03' 391.30 feet along the Government Land of Kamalomaloi;
96. 279° 29' 249.90 feet along the Government Land of Kamalomaloi;
97. 273° 37' 331.40 feet along the Government Land of Kamalomaloi;
98. 265° 55' 440.30 feet along the Government Land of Kamalomaloi;
99. 296° 02' 1097.00 feet along the Government Land of Kamalomaloi;
100. 311° 02' 163.00 feet along the Government Land of Kamalomaloi;
101. 288° 16' 180.80 feet along the Government Land of Kamalomaloi;
102. 298° 32' 899.60 feet along the Government Land of Kamalomaloi;
103. 297° 54' 498.30 feet along the Government Land of Kamalomaloi;
104. 283° 02' 540.50 feet along the Government Land of Kamalomaloi;
105. 267° 57' 279.83 feet along the Government Land of Kamalomaloi to the point of beginning and containing a gross area of 1075.599 acres.

EXCLUDING THEREFROM Royal Patent 7149, Land Commission Award 10689 to Puukuakahi containing an area of 2.980 acres.

and leaving a net area of 1072.619 acres.

TOGETHER WITH easements as shown on the Right-of-Way Map of the Kauai Belt Road, Federal Aid Project No. F 31 (1), filed in the Office of the Superintendent of Public Works of the State of Hawaii; as reserved
in that certain instrument dated August 29, 1955, recorded in Liber 3015 at Page 326, said easements being more particularly described as follows:

(A) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 4 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIK00" being 17,295.47 feet south and 8,899.79 feet east, thence running by azimuth measured clockwise from true South:

1. 108° 04' 30" 140.00 feet and containing an area of 1,400 square feet, more or less.

(B) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 5 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIK00" being 17,023.07 feet south and 8,967.66 feet east, thence running by azimuth measured clockwise from true South:

1. 108° 04' 30" 100.00 feet and containing an area of 2,000 square feet, more or less.
All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 6 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 16,477.10 feet south and 9,145.85 feet east, thence running by azimuth measured clockwise from true South:

1. 125° 30' 104.81 feet and containing an area of 2,096 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 7 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 16,272.06 feet south and 9,212.77 feet east, thence running by azimuth measured clockwise from true South:

1. 108° 04' 30" 100.00 feet and containing an area of 1,000 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680,
Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 8, for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, and thus bounded and described as follows:

Beginning at the southeast corner of this piece of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 15,801.15 feet south and 9,347.31 feet east, thence running by azimuths measured clockwise from true South:

1. On a curve to the right with a radius of 560.00 feet, the chord azimuth and distance being:

\[59° 08' 32" \quad 141.33 \quad \text{feet}\]

2. Thence along the Northwest side of Kauai Belt Road, Project No. F 31 (1), on a curve to the left with a radius of 5950.00 feet, the chord azimuth and distance being:

\[194° 21' 01" \quad 48.75 \quad \text{feet}\]

3. Thence on a curve to the left with a radius of 522.41 feet, the chord azimuth and distance being:

\[234° 44' 26" \quad 151.90 \quad \text{feet}\]

4. Thence along the Southeast side of Kauai Belt Road, Project No. F 31 (1), on a curve to the right with a radius of 6050.00 feet, the chord azimuth and distance being:

\[13° 19' 38" \quad 64.18 \quad \text{feet to the point of beginning and containing an area of 5,516 square feet, more or less.}\]
(F) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 9 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 15,452.56 feet south and 9,421.38 feet east, thence running by azimuth measured clockwise from true South:

1. 100° 51' 100.00 feet and containing an area of 1,000 square feet, more or less.

(G) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Grant Number 3158 to E. Krull) situate, lying and being at Kumukumu, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 10 for drainage purposes, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 14,443.45 feet south and 9,624.97 feet east, thence running by azimuth measured clockwise from true South:

1. 141° 00' 143.91 feet and containing an area of 1,450 square feet, more or less.

(H) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Grant Number 3158 to E. Krull) situate, lying and being at Kumukumu, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 11 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and
extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 14,061.76 feet south and 9,677.76 feet east, thence running by azimuth measured clockwise from true South:

1. 133° 40' 107.09 feet and containing an area of 1,071 square feet, more or less.

(I) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Grant Number 3158 to E. Krull) situate, lying and being at Kumukumu, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 12 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, and thus bounded and described as follows:

Beginning at the southeast corner of this piece of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 13,785.93 feet south and 9,730.63 feet east, thence running by azimuths measured clockwise from true South:

1. 143° 10' 108.19 feet;
2. 190° 51' 42.04 feet along the Northwest side of Kauai Belt Road, Project No. F 31 (1);
3. 323° 10' 108.19 feet;
4. 10° 51' 42.04 feet along the Southeast side of Kauai Belt Road, Project No. F 31 (1) to the point of beginning and containing an area of 3,364 square feet, more or less.

(J) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Grant Number 3158 to E. Krull) situate, lying and being at Kumukumu,
Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 13 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 13,514.93 feet south and 9,782.57 feet east, thence running by azimuth measured clockwise from true South:

1. 100° 51' 80.00 feet and containing an area of 800 square feet, more or less.

(K) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)), situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 14 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 12,774.70 feet south and 9,924.45 feet east, thence running by azimuth measured clockwise from true South:

1. 100° 51' 80.00 feet and containing an area of 800 square feet, more or less.

(L) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)), situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 15 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance
of 10.00 feet on each side of the centerline, and thus
bounded and described as follows:

Beginning at the east end of the center line of this strip
of land, on the southeast side of Kauai Belt Road, Federal
Aid Project No. F 31 (1), the coordinates of said point of
beginning referred to Government Survey Triangulation
Station "KIKOO" being 12,386.47 feet south and 9,998.86
feet east, thence running by azimuth measured clockwise
from true South:

1. 100° 51' 80.00 feet and containing an
   area of 1,600 square
   feet, more or
   less.

(M) All of that certain parcel of land (being a portion of the
land described in and covered by Royal Patent Number 5680,
Land Commission Award Number 11216, Apana 6 to M.
Kekauonohi (Certificate of Boundaries No. 1)), situate,
lying and being at Kealia, Puna, Island and County of
Kauai, State of Hawaii, being EASEMENT 16 for concrete
Syphon, under and across Kauai Belt Road, being a strip of
land 10.00 feet wide, and extending for a distance of 5.00
feet on each side of the centerline, and thus bounded and
described as follows:

Beginning at the east end of the center line of this strip
of land, on the southeast side of Kauai Belt Road, Federal
Aid Project No. F 31 (1), the coordinates of said point of
beginning referred to Government Survey Triangulation
Station "KIKOO" being 12,198.71 feet south and 10,055.21
feet east, thence running by azimuth measured clockwise
from true South:

1. 100° 51' 120.00 feet and containing an
   area of 1,200 square
   feet, more or
   less.

(N) All of that certain parcel of land (being a portion of the
land described in and covered by Royal Patent Number 5680,
Land Commission Award Number 11216, Apana 6 to M.
Kekauonohi (Certificate of Boundaries No. 1) situate, lying
and being at Kealia, Puna, Island and County of Kauai,
State of Hawaii, being EASEMENT 17 for drainage purposes,
under and across Kauai Belt Road, being a strip of land
10.00 feet wide, and extending for a distance of 5.00 feet
on each side of the centerline, and thus bounded and
described as follows:
Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 11,695.61 feet south and 10,137.39 feet east, thence running by azimuth measured clockwise from true South:

1. 96° 05' 30" 120.00 feet and containing an area of 1,200 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 18 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the east side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 11,670.36 feet south and 10,140.01 feet east, thence running by azimuth measured clockwise from true South:

1. 95° 44' 120.00 feet and containing an area of 2,400 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 19 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the east side of Kauai Belt Road, Federal Aid Aid
Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,853.73 feet south and 10,139.46 feet east, thence running by azimuth measured clockwise from true South:

1. 110° 00' 122.59 feet and containing an area of 2,452 square feet, more or less.

(Q) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)), situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 20 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the east side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,816.46 feet south and 10,135.49 feet east, thence running by azimuth measured clockwise from true South:

1. 124° 30' 174.01 feet and containing an area of 1,740 square feet, more or less.

(R) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 21 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the east side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,751.45 feet south and 10,127.74 feet east, thence running by azimuth measured clockwise from true South:

1. 110° 00' 122.59 feet and containing an area of 2,452 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)), situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 20 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the east side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,816.46 feet south and 10,135.49 feet east, thence running by azimuth measured clockwise from true South:

1. 124° 30' 174.01 feet and containing an area of 1,740 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 21 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the east side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,751.45 feet south and 10,127.74
feet east, thence running by azimuth measured clockwise from true South:

1. 90° 00' 131.09 feet and containing an area of 2,622 square feet, more or less.

BEING THE PREMISES ACQUIRED BY DEED

GRANTOR : KEALIA MAUKA HOLDINGS LLC, a Delaware limited liability company

GRANTEE : KEALIA PLANTATION COMPANY, LLC, a California limited liability company

DATED : April 23, 2001
RECORDED : Document No. 2001-097096
<table>
<thead>
<tr>
<th>TMK No.</th>
<th>Description of Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4) 4-7-003-015</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 8357, Land Commission Award Number 8842, Apana 1 to Kaawapuoule) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-003-015(4).</td>
</tr>
<tr>
<td>(4) 4-7-003-016</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 8357, Land Commission Award Number 8842, Apana 2 to Kaawapuoule) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-003-016(4).</td>
</tr>
<tr>
<td>(4) 4-7-003-014</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 6905, Land Commission Award Number 10148, Apana 2 to Mamaki) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-003-014(4).</td>
</tr>
<tr>
<td>(4) 4-7-003-013</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 6905, Land Commission Award Number 10148, Apana 1 to Mamaki) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-003-013(4).</td>
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<tr>
<td>(4) 4-7-003-018</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 7361, Land Commission Award Number 10628, Apana 1 to Puhi) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-003-018(4).</td>
</tr>
<tr>
<td>(4) 4-7-003-019</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 7361, Land Commission Award Number 10628, Apana 2 to Puhi) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-003-019(4).</td>
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<tr>
<td>(4) 4-7-003-020</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 7360, Land Commission Award Number 8833, Apana 1 to Kiaipa) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-003-020(4).</td>
</tr>
<tr>
<td>TMK No.</td>
<td>Description of Land</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(4) 4-7-003-021</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 7360, Land Commission Award Number 8833, Apana 2 to Kiaipa) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-003-021(4).</td>
</tr>
<tr>
<td>(4) 4-7-003-017</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 6387, Land Commission Award Number 1980, Apana 2 to Puali) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-003-017(4).</td>
</tr>
<tr>
<td>(4) 4-7-003-005</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 6735, Land Commission Award Number 10149, Apana 1 to Makuahine) situate, lying and being at Kealia, District of Puna, Island and County of Kauai, State of Hawaii, bearing a Tax Key designation of 4-7-003-005(4).</td>
</tr>
<tr>
<td>(4) 4-7-004-008</td>
<td>All of that certain parcel of land (being all of the land described in and covered by Royal Patent Number 7149, Land Commission Award Number 10689 to Puukuakahi) situate, lying and being at Homaikawaa, District of Puna, Island and County of Kauai, State of Hawaii, bearing Tax Key designation 4-7-004-008(4).</td>
</tr>
</tbody>
</table>
EXHIBIT B
TO GRANT OF EASEMENTS

MAP

[SEE ATTACHED MAP CONSISTING OF 3 PAGES]
EXHIBIT C
TO GRANT OF EASEMENTS

SURVEY

[SEE ATTACHED SURVEY CONSISTING OF 1 PAGE]
EXHIBIT D
TO GRANT OF EASEMENTS

LEGAL DESCRIPTION OF EASEMENT AREA

[SEE ATTACHED LEGAL DESCRIPTION CONSISTING OF 13 PAGES]
EASEMENT W-6
(For Access and Waterline Purposes)

LAND SITUATED AT KEALIA, KAWAIHAU, KAUAI, HAWAII

Being a Portion of L.C. Aw. 11216: 6
Being Also a Portion of Segment B Serviced Lands

Beginning at the northeast corner of this parcel of land on the west side of Kealia Road, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 18,017.57 feet South and 8,062.98 feet East, thence running by azimuths measured clockwise from true South:

1. 18° 28' 30.10 feet along the west side of Kealia Road;
2. 103° 50' 333.46 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
3. 345° 00' 64.10 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
4. 92° 46' 136.84 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
5. 188° 03' 118.19 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
6. 285° 50' 147.95 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
7. 283° 50' 303.32 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) to the point of beginning and containing an area of 22,602 square feet.
SECTION A OF EASEMENT W-6
(For Well and Waterline Purposes)

LAND SITUATED AT KEALIA, KAWAIH AU, KAUAI, HAWAII

Being a Portion of L.C. Aw. 11216: 6
Being Also a Portion of Segment B Serviced Lands

Beginning at the northeast corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 17,931.38 feet South and 7,720.28 feet East, thence running by azimuths measured clockwise from true South:

<table>
<thead>
<tr>
<th>Azimuth</th>
<th>Distance</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>345° 00'</td>
<td>100.35 feet</td>
<td>along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);</td>
</tr>
<tr>
<td>92° 46'</td>
<td>136.84 feet</td>
<td>along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);</td>
</tr>
<tr>
<td>188° 03'</td>
<td>118.19 feet</td>
<td>along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);</td>
</tr>
<tr>
<td>285° 50'</td>
<td>97.87 feet</td>
<td>along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) to the point of beginning and containing an area of 12,269 square feet.</td>
</tr>
</tbody>
</table>
SECTION B OF EASEMENT W-6
(For Access and Waterline Purposes)

LAND SITUATED AT KEALIA, KAWAIHAU, KAUAI, HAWAII

Being a Portion of L.C. Aw. 11216: 6
Being Also a Portion of Segment B Serviced Lands

Beginning at the north corner of this parcel of land on the south side of Kealia Road, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 18,017.57 feet South and 8,062.98 feet East, thence running by azimuths measured clockwise from true South:

1. 18° 28' 30.10 feet along the south side of Kealia Road;
2. 103° 50' 333.46 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
3. 165° 00' 36.25 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
4. 285° 50' 50.08 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
5. 283° 50' 303.32 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) to the point of beginning and containing an area of 10,333 square feet.
EASEMENT W-7
(For Access and Waterline Purposes)

LAND SITUATED AT KEALIA, KAWAIHAU, KAUAI, HAWAII

Being a Portion of L.C. Aw. 11216: 6
Being Also a Portion of Segment B Serviced Lands

Beginning at the southwest corner of this parcel of land on the northeast side of Kealia Road, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 14,784.18 feet South and 5,647.64 feet East, thence running by azimuths measured clockwise from true South:

1. 217° 48' 47.77 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

2. 196° 24' 718.81 feet;

3. 175° 00' 205.08 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

4. 85° 00' 72.04 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

5. 175° 00' 130.00 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

6. 265° 00' 130.00 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

7. 355° 00' 130.00 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

8. 85° 00' 27.96 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

9. 355° 00' 205.08 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
thence along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) on a curve to the right with a radius of 1,015.00 feet, the chord azimuth and distance being:

10. \(16^\circ 24'\) \(740.70\) feet;
11. \(37^\circ 48'\) \(47.77\) feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

thence along the northeast side of Kealia Road on a curve to the right with a radius of 1,480.00 feet, the chord azimuth and distance being:

12. \(127^\circ 48'\) \(30.00\) feet to the point of beginning and containing an area of 46,896 square feet.
SECTION A OF EASEMENT W-7
(For Water Tank and Waterline purposes)

LAND SITUATED AT KEALIA, KAWAIHAU, KAUAI, HAWAII

Being a Portion of L.C. Aw. 11216: 6
Being Also a Portion of Segment B Serviced Lands

Beginning at the northeast corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 13,718.01 feet South and 5,908.40 feet East, thence running by azimuths measured clockwise from true South:

1. 355° 00' 130.00 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

2. 85° 00' 130.00 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

3. 175° 00' 130.00 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

4. 265° 00' 130.00 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) to the point of beginning and containing an area of 16,900 square feet.
SECTION B OF EASEMENT W-7  
(For Access and Waterline Purposes)  

LAND SITUATED AT KEALIA, KAWAIHAU, KAUAI, HAWAII  

Being a Portion of L.C. Aw. 11216: 6  
Being Also a Portion of Segment B Serviced Lands  

Beginning at the west corner of this parcel of land on the northeast side of Kealia Road, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 14,784.18 feet South and 5,647.64 feet East, thence running by azimuths measured clockwise from true South:

1. 217° 48' 47.77 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands); thence along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) on a curve to the left with a radius of 985.00 feet, the chord azimuth and distance being:

2. 196° 24' 718.81 feet;  
3. 175° 00' 205.08 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);  
4. 265° 00' 30.00 feet along the remainder of L.C. Aw. 11216: 6 (Section A of Easement W-7);  
5. 355° 00' 205.08 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands); thence along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) on a curve to the right with a radius of 1,015.00 feet, the chord azimuth and distance being:

6. 16° 24' 740.70 feet;  
7. 37° 48' 47.77 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands); thence along the north side of Kealia Road on a curve to the right with a radius of 1,480.00 feet, the chord azimuth and distance being:
8. 127° 48' 30.00 feet to the point of beginning and containing an area of 29,996 square feet.
EASEMENT W-8
(For Access and Waterline Purposes)

LAND SITUATED AT KEALIA, KAWAIHOU, KAUAI, HAWAII

Being a Portion of L.C. Aw. 11216: 6
Being Also a Portion of Segment B Serviced Lands

Beginning at the south corner of this parcel of land on the west side of Kuhio Highway, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 16,465.27 feet South and 9,044.48 feet East, thence running by azimuths measured clockwise from true south:

1. 108° 04' 30" 1,084.84 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
   thence along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) on a curve to the left with a radius of 725.00 feet, the chord azimuth and distance being:

2. 96° 10' 59" 298.80 feet;

3. 41° 30' 170.80 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

4. 136° 28' 23.10 feet along the northeast side of Kealia Road;
   thence along the northeast side of Kealia Road on a curve to the left with a radius of 270.00 feet, the chord azimuth and distance being:

5. 135° 43' 23" 7.01 feet;

6. 221° 30' 179.90 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
   thence along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) on a curve to the right with a radius of 755.00 feet, the chord azimuth and distance being:

7. 275° 44' 322.75 feet;
8. 288° 04' 30"  1,084.84 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
9. 18° 04' 30"  30.00 feet along the west side of Kuhio Highway to the point of beginning and containing an area of 47,197 square feet.
EASEMENT A
(For Access Purposes)

LAND SITUATED AT KEALIA, KAWAIH AU, KAUAI, HAWAII

Being a Portion of L.C. Aw. 11216: 6
Being Also a Portion of Segment B Serviced Lands

Beginning at the south corner of this parcel of land on the north side of Kealia Road,
the coordinates of said point of beginning referred to Government Survey Triangulation
Station "KIKOO" being 13,811.11 feet South and 4,875.85 feet East, thence running by
azimuths measured clockwise from true South:

1. 140° 20' 02"
   32.28 feet; along the north side of Kealia Road on a
curve to the right with a radius of 980.00
feet, the chord azimuth and distance being:

2. 252° 00'
   45.26 feet along the remainder of L.C. Aw. 11216:
6 (Segment B Serviced Lands);

   thence along the remainder of L.C. Aw.
11216: 6 (Segment B Serviced Lands) on a
curve to the right with a radius of 130.00
feet, the chord azimuth and distance being:

3. 267° 00'
   67.29 feet;

4. 282° 00'
   83.53 feet along the remainder of L.C. Aw. 11216:
6 (Segment B Serviced Lands);

   thence along the remainder of L.C. Aw.
11216: 6 (Segment B Serviced Lands) on a
curve to the left with a radius of 450.00
feet, the chord azimuth and distance being:

5. 268° 30'
   210.10 feet;

6. 255° 00'
   137.36 feet along the remainder of L.C. Aw. 11216:
6 (Segment B Serviced Lands);
thence along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) on a curve to the right with a radius of 430.00 feet, the chord azimuth and distance being:

7. $274^\circ 56' 45''$ 293.37 feet;
8. $265^\circ 00'$ 99.92 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
9. $355^\circ 00'$ 30.00 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);
10. $85^\circ 00'$ 108.09 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

thence along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) on a curve to the left with a radius of 400.00 feet, the chord azimuth and distance being:

11. $95^\circ 30' 35''$ 280.29 feet;
12. $75^\circ 00'$ 137.36 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

thence along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) on a curve to the right with a radius of 480.00 feet, the chord azimuth and distance being:

13. $88^\circ 30'$ 224.11 feet;
14. $102^\circ 00'$ 83.53 feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands);

thence along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) on a curve to the left with a radius of 100.00 feet, the chord azimuth and distance being:

15. $87^\circ 00'$ 51.76 feet;
feet along the remainder of L.C. Aw. 11216: 6 (Segment B Serviced Lands) to the point of beginning and containing an area of 28,096 square feet.
EXHIBIT E
TO GRANT OF EASEMENTS

PREAPPROVED ALTERNATE ROUTES FOR REALIGNMENT OF EASEMENT A

1. A course that runs from Kealia Road in the general vicinity of where the existing Easement A begins, then north to a location running generally along the ridgeline of the valley that is on the Anahola side of the existing tanks, and then to the tanks.

2. A course that runs along the existing dirt road that begins at the location of the tanks and heads makai along the ridgeline that is on the Anahola side of the tanks, and runs makai to a point where it heads in the direction of Kapaa and exits at a junction with Kealia Road, generally at a location where the existing old subdivision (Kealia Town Tract) is located.
DEED

This Deed (this "Deed") is made as of March 24, 2006, by Kealia Plantation Company, LLC, a California limited liability company (the "Grantor"), the address of which is c/o Belles Graham Proudfoot & Wilson, Watumull Plaza, 4334 Rice Street, Suite 202, Lihue, Hawaii 96766-1388, Attention: Lorna A. Nishimitsu, Esq., in favor of Plantation Partners Kauai, LLC, a Hawaii limited liability company ("PPK"), as to a two and one hundred ninety-three one-thousandths percent (2.193%) undivided interest, Kealiakealanani, LLC, a Hawaii limited liability company, as to a ninety three and four hundred twenty-one one-thousandths percent (93.421%) undivided interest, and DCA Hawaii, LLC, a Hawaii limited liability company, as to a four and three hundred eighty-six one-thousandths percent (4.386%) undivided interest, all as tenants-in-common (collectively, the "Grantees"), whose address is c/o P.O. Box 1318, Kilauea, Hawaii 96754.

WITNESSETH:

That for Ten U.S. Dollars (U.S. $10.00) and other valuable consideration paid by the Grantees to the Grantor, the receipt of which is hereby acknowledged, and pursuant to that
certain Purchase and Sale Agreement dated May 6, 2005 (as amended from time to time, the "Purchase Agreement"), by and between the Grantor, as seller, and PPK, the Grantees' predecessor-in-interest, as purchaser, the Grantor does hereby grant and convey unto the Grantees, that certain real property (the "Hawaii Property") described in Schedule 1 attached hereto, which Schedule 1 is incorporated into this Deed by reference;

AND the reversions, remainders, rents, issues and profits thereof and all of the estate, right, title and interest of the Grantor, both at law and in equity, therein and thereto.

SUBJECT, HOWEVER, to: (i) existing county, state and federal laws, rules and regulations, including zoning ordinances and other land use regulations and restrictions applicable to the Hawaii Property; (ii) claims, if any, to the Hawaii Property arising out of rights customarily and traditionally exercised for subsistence, cultural, religious, access or gathering purposes, and such claims or rights, including access, use and/or occupancy rights, as may be attendant or ancillary to kuleana claims on or affecting the Hawaii Property; (iii) encroachments, easements and other rights or facts which may or would be disclosed by a correct boundary or improvement survey or archaeological study, including, without limitation, trails, rights-of-way, historic property, burial sites and other items of historical, archaeological or religious significance; and (iv) all encumbrances, exceptions, reservations, easements and other items set forth in this Deed.

In consideration of the premises, the Grantor does hereby covenant that the Hawaii Property is free and clear of and from all liens and encumbrances made or suffered by the Grantor, excepting the lien of real property taxes assessed for the current fiscal year but not yet due, and further excepting any and all exceptions, reservations and encumbrances created by or referred to in this Deed; that the Grantor has good right to sell and convey the Hawaii Property; and that the Grantor will WARRANT AND DEFEND the same unto the Grantees against the lawful claims and demands of all persons claiming through the Grantor, except as aforesaid.

This conveyance and the covenants of the Grantor shall be binding upon the Grantor and the Grantor's successors and assigns, and shall run in favor of and inure to the benefit of the Grantees and the Grantees' successors and assigns.

The Grantor has executed this Deed as of the date first referenced above.

Grantor: Kealia Plantation Company, LLC, a California limited liability company

By: 

Justin Hughes, Manager
STATE OF CALIFORNIA
COUNTY OF SAN FRANCISCO

On January 27, 2006 before me, Heather Adler

personally appeared Justin Hughes,

☑ personally known to me — OR — ☐ proved to me on the basis of satisfactory evidence to be

the person whose name is subscribed to the within

instrument and acknowledged to me that he executed

the same in his authorized capacity, and that by his

signature on the instrument the person or the entity

upon behalf of which the person acted, executed the

instrument.

WITNESS my hand and official seal.

Heather H. Adler
Notary Public — California
San Francisco County
SCHEDULE 1 TO DEED

DESCRIPTION OF MARKETABLE TITLE REAL PROPERTY

Subject, However, to the following:

1. nondelinquent real property taxes and assessments;
2. existing county, state and federal laws, rules and regulations, including zoning ordinances and other land use regulations and restrictions applicable to the Hawaii Property;
3. encroachments, easements and other rights or facts disclosed by any survey of the Hawaii Property; and any matters which may or would be disclosed by any further survey or archaeological study of the Hawaii Property, including, without limitation, trails, rights of way, historic property, burial sites and other items of historical, archaeological or religious significance;
4. claims, if any, to the Hawaii Property arising out of rights customarily and traditionally exercised for subsistence, cultural, religious, access or gathering purposes;
5. claims or rights, including access, use and/or occupancy rights, as may be attendant or ancillary to kuleana claims on or affecting the Hawaii Property;
6. creation or loss of any portion of the Hawaii Property by accretion, avulsion, erosion or artificial means;
7. rights or claims of persons residing on, crossing over, or otherwise in possession of the Hawaii Property or any portion thereof;
8. trails, roadways and other rights of way, if any, including, without limitation, any rights or claims under Chapter 264, Hawaii Revised Statutes;
9. any mechanic's, materialmen's or other liens which may affect the Hawaii Property resulting from PPK or Grantee's activities on or relating to the Hawaii Property pursuant to Section 8 of the Purchase Agreement;
10. the reservations, exceptions, conditions and other provisions contained in this Deed;
11. Reservation in favor of the State of Hawaii of all mineral and metallic mines.
12. As to Tax Key (4) 4-7-003-006

(A) The terms, covenants and conditions hereinafter set forth, and as contained in that certain instrument dated August 29, 1955, recorded in Liber 3015 at Page 326, regarding those certain easements referred to in Schedule C, to-wit:

1. That the maintenance, repair, replacement and operation of the easements shall be subject to such laws, rules, regulations and requirements as are or may be in force from time to time for the protection of highways and shall meet all safety
requirements of the Territorial Highway Engineer or other duly authorized officers of the Grantee.

2. That the Grantor shall repair or restore at its own cost and expense all damage to the roadway or to the surface of the land resulting from any such maintenance, repair, replacement or operation of the easements herein, and shall indemnify and save harmless the Grantee, its successors and assigns, against all losses, damages or injury to the persons or property of others caused by the act of the Grantor, its successors, assigns, employees, contractors and agents, in the operation, use or enjoyment of the easements reserved herein or incidental to the maintenance, repair or replacement thereof.

3. That the easements herein reserved shall cease and terminate when not used in connection with agricultural and sugar cane growing purposes.”

13. As to Tax Key (4) 4-7-004-009

(A) Easement 1 for waterline purposes (15-feet wide) for waterline purposes, in favor of Lihue Plantation Company, Ltd., covering the existing waterline in Lot B, approximate area of 7,735 square feet, as shown on survey map prepared by Russell Figueiroa, Land Surveyor, with R. M. Towill Corporation, dated October 9, 1995 and on survey map prepared by James R. Thompson, Land Surveyor, with Walter P. Thompson, Inc., dated August 4, 2005, last updated February 21, 2006.

14. As to Tax Key (4) 4-7-003-002

(A) A non-exclusive access easement over the existing Cane Haul Road, located along the southerly portion of the premises described in Schedule C, as set forth in that certain instrument dated October 24, 1978, recorded in Liber 13408 at Page 110.

(B) Easement 1 for access purposes (40-feet wide), containing an area of 2,230 square feet, in favor of Lot 3, as shown on a map prepared by Wes Thomas and Associates, Inc. dated July 6, 1978.

(C) Easement 2 for access and utility purposes, containing an area of 0.561 acre, in favor of Lots 3-A and 3-B, as shown on a map prepared by Esaki Surveying and Mapping, Inc. dated December 5, 1986.

(D) Grant

To: Kealia Irrigation Company, Inc., a Hawaii non-profit corporation, Cornerstone Hawaii Holdings LLC, a Colorado limited liability company, and Kealia Makai Owners Association, a Hawaii non-profit corporation

Dated: June 26, 2001
Recorded: Document No. 2001-097106
Granting:

- a non-exclusive easement over Segment B Infrastructure Easement 1 (40 ft. wide for irrigation purposes);
- Segment B Infrastructure Easement 2 (30 ft. wide for irrigation purposes);
- Halaula Reservoir Easement (for irrigation purposes);
- Halaula Reservoir Access Easement (15 ft. wide for access purposes); said easements being more particularly described therein.


(F) Proposed Easement W-6, area 22,602 square feet for access and waterline purposes, as shown on survey map prepared by Dennis M. Esaki, Land Surveyor, with Esaki Surveying & Mapping, Inc., dated May 20, 2005, and as shown on survey map prepared by James R. Thompson, Land Surveyor, with Walter P. Thompson, Inc., dated August 4, 2005, last updated February 21, 2006.

(G) All rights, claims and/or interests of others which exist or might arise by virtue of those kuleana(s) described in Schedule C.

15. As to Tax Key (4) 4-7-004-001

(A) The terms, covenants and conditions hereinafter set forth, and as contained in that certain instrument dated August 29, 1955, recorded in Liber 3015 at Page 326, regarding those certain easements referred to in Schedule C, to-wit:

"1. That the maintenance, repair, replacement and operation of the easements shall be subject to such laws, rules, regulations and requirements as are or may be in force from time to time for the protection of highways and shall meet all safety requirements of the Territorial Highway Engineer or other duly authorized officers of the GRANTEE.

2. That the GRANTOR shall repair or restore at its own cost and expense all damage to the roadway or to the surface of the land resulting from any such maintenance, repair, replacement or operation of the easements herein, and shall indemnify and save harmless the GRANTEE, its successors and assigns, against all losses, damages or injury to the persons or property of others caused by the act of the GRANTOR, its successors, assigns, employees, contractors and agents, in the operation, use or enjoyment of the easements reserved herein or incidental to the maintenance, repair or replacement thereof.

3. That the easements herein reserved shall cease and terminate when not used in connection with agricultural and sugar cane growing purposes."

sf-2005989.v3
(B) Grant

To: Kealia Irrigation Company, Inc., a Hawaii non-profit corporation, Cornerstone Hawaii Holdings LLC, a Colorado limited liability company, and Kealia Makai Owners Association, a Hawaii non-profit corporation

Dated: June 26, 2001

Recorded: Document No. 2001-097106

Granting: a non-exclusive easement over Segment B Infrastructure Easement 3 (30 ft. wide for irrigation purposes); and Upper Spalding Sump Pipeline Easement 2 (for irrigation purposes); said easements being more particularly described therein

(C) All rights, claims and/or interest of others which exist or might arise by virtue of the kuleana described in Schedule C.

(D) The terms and provisions, including the failure to comply with any covenants, conditions and reservations, contained in the following:

Instrument: Declaration of Restrictive Covenants
Dated: July 15, 2002
Recorded: Document No. 2002-134930


16. As to Tax Keys (4) 4-7-003-002 and (4) 4-7-004-001

(A) The terms and provisions, including the failure to comply with any covenants, conditions and reservations, contained in the following:

Instrument: Notice of Dedication to Agriculture
Recorded: Document No. 2003-065299
Parties: Kealia Plantation Company, LLC
Re: for a term of ten (10) years
17. As to Tax Keys (4) 4-7-004-009, (4) 4-7-003-002 and (4) 4-7-004-001

(A) The effect of the following matters shown on the Archaeological Reconnaissance Survey Report, prepared by Scientific Consultant Services Inc., revised July 2005 (the "Survey"):

1. Remnant Archaeological Terraces Site TS-18;
2. Possible Religious Site TS-2;
3. Burial Disinterment and Debris Deposition Site TS-26;
4. Historic Japanese Cemetery Site TS-13;
5. Spalding Monument Site TS-32;
6. Railroad Bridge Site TS-7; and

(B) Any mitigation measures and easements recommended by the Survey or arising or required by federal, state, or county laws or regulations, in connection with the matters referred to in Item No. 17(A).

18. The following encroachments or any other matters as shown on survey map prepared by James R. Thompson, Land Surveyor, with Walter P. Thompson, Inc., dated August 4, 2005, last updated February 21, 2006:

(A) As to TMK: (4) 4-7-004-009

A CRM swale crosses from Kuhio Highway onto the property.

(B) As to TMK: (4) 4-7-003-002

(1) A single family dwelling crosses from TMK: (4) 4-7-003-007 onto the property.

(2) Shed located outside excluded Royal Patent 6735, Land Commission Award 10149, Apana 1 to Makuahine.

(C) As to TMK: (4) 4-7-004-001

Several power poles, overhead power lines and a Kauai Electric Company box cross from Kuhio Highway onto the property.

19. The rights of tenants in possession pursuant to the unrecorded leases(s).
20. GRANT

TO: KEALIA WATER COMPANY HOLDING LLC, a Delaware limited liability company

DATED: December 22, 2004

RECORDED: Document No. 2006-044972

GRANTING: for the limited purposes set forth in Paragraph 2 therein, four (4) express, perpetual, appurtenant easements solely in the locations shown on the Survey and described on Exhibit D attached thereto

21. GRANT

TO: CORNERSTONE HAWAII HOLDINGS LLC, a Colorado limited liability company

DATED: December 22, 2004

RECORDED: Document No. 2006-044973

GRANTING: for the limited purposes set forth in Paragraph 2 therein, one (1) express, perpetual, appurtenant non-exclusive easement solely in the location shown on the survey attached thereto as Exhibit D and described in Exhibit E attached thereto
ALL of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi) situate, lying and being at Kealia, Kawaihau, Island and County of Kauai, State of Hawaii, being LOT A, and thus bounded and described as per survey of James R. Thompson, Land Surveyor, with Walter P. Thompson, Inc., dated August 4, 2005, to-wit:

Beginning at the south corner of this parcel of land, the same being the north corner of the intersection of Kealia Road (Government Road) and Kuhio Highway Federal Aid Project No. F-31(1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 18,827.66 feet south and 8,284.02 feet east and thence running by azimuths measured clockwise from true South:

1. 162° 10' 95.38 feet along the east side of Kealia Road (Government Road);

   Thence along the east side of Kealia Road (Government Road) on a curve to the left with a radius of 920.00 feet, the chord azimuth and distance being

2. 159° 50' 74.91 feet;

3. 157° 30' 403.00 feet along the east side of Kealia Road (Government Road);

   Thence along the east side of Kealia Road (Government Road) on a curve to the right with a radius of 240.00 feet, the chord azimuth and distance being

4. 177° 59' 167.97 feet;

5. 198° 28' 22.00 feet along the east side of Kealia Road (Government Road) to the centerline of a drainage ditch;

6. 286° 18' 229.00 feet along the centerline of a drainage ditch along Lot B, along the remainder of R. P. 5680, L. C. Aw. 11216, Ap. 6 to Kekauonohi;

7. 315° 16' 172.12 feet along the centerline of a drainage ditch along Lot B,
along the remainder of R. P. 5680, L. C. Aw. 11216, Ap. 6 to Kekauonohi to the westerly side of Kuhio Highway (F.A.P. No. F-31(1);

8. 18° 04' 30" 22.75 feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1);

9. 288° 04' 30" 20.00 feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1);

10. 18° 04' 30" 200.00 feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1);

11. 288° 04' 30" 20.00 feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1);

12. 18° 04' 30" 327.63 feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1) to the point of beginning and containing an area of 3.199 acres, more or less.

TOGETHER WITH easements for Industrial Track crossing, trucking and other means of vehicular transportation over and across Kauai Belt Road, being Easements 1 and 2, as shown on the Right-of-Way Map of the Kauai Belt Road, Federal Aid Project No. F 31 (1), filed in the Office of the Superintendent of Public Works of the State of Hawaii; as reserved in that certain instrument dated August 29, 1955, recorded in Liber 3015 at Page 326, said easements being more particularly described as follows:

(A) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 1, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "Kikoo" being 18,892.75 feet south and 8,346.93 feet east, thence running by azimuths measured clockwise from true South:
1. On a curve to the left with a radius of 140.00 feet, the chord azimuth and distance being 144° 56' 40" 50.00 feet;

2. 134° 39' 30" 44.73 feet and containing an area of 1900 square feet.

(B) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 2, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "Kikoo" being 18,793.83 feet south and 8,379.22 feet east, thence running by azimuths measured clockwise from true South:

1. On a curve to the right with a radius of 180.00 feet, the chord azimuth and distance being 83° 43' 10" 87.82 feet and containing an area of 1,774 square feet.

TOGETHER WITH:

ALL of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi) situate, lying and being at Kealia, Kawaihau, Island and County of Kauai, State of Hawaii, being LOT B, and thus bounded and described as per survey of James R. Thompson, Land Surveyor, with Walter P. Thompson, Inc., dated August 4, 2005, to-wit:

Beginning at the northeast corner of this parcel of land, the same being the south corner of Lot 16, File Plan 505, Kealia Town Tract, Block A and on the westerly side of Kuhio Highway, Federal Aid Project No. F-31(1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 17,815.04 feet south and 8,582.95 feet east and thence running by azimuths measured clockwise from true South:

1. \[18^\circ\ 04'\ 30"\ \ 127.76\ \ \text{feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1));}\]

2. \[108^\circ\ 04'\ 30"\ \ 10.00\ \ \text{feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1));}\]

3. \[18^\circ\ 04'\ 30"\ \ 377.25\ \ \text{feet along the westerly side of Kuhio Highway (F.A.P. No. F-31(1));}\]

4. \[135^\circ\ 16'\ \ 172.12\ \ \text{feet along the centerline of a drainage ditch, along Lot A, along the remainder of R. P. 5680, L. C. Aw. 11216, Ap. 6 to M. Kekauonohi;}\]

5. \[106^\circ\ 18'\ \ 229.00\ \ \text{feet along the centerline of a drainage ditch, along Lot A, along the remainder of R. P. 5680, L. C. Aw. 11216, Ap. 6 to M. Kekauonohi;}\]

6. \[198^\circ\ 28'\ \ 117.00\ \ \text{feet along the east side of Kealia Road (Government Road);}\]

Thence along the east side of Kealia Road (Government Road) on a curve to the left with a radius of 290.00 feet, the chord azimuth and distance being

7. \[168^\circ\ 38'\ \ 288.54\ \ \text{feet;}\]
feet along the east side of Kealia Road (Government Road);
Thence along the east side of Kealia Road (Government Road) on a curve to the right with a radius of 460.00 feet, the chord azimuth and distance being

10. 179° 42' 157.00 feet; along the east side of Kealia Road (Government Road);
Thence along the east side of Kealia Road (Government Road) on a curve to the left with a radius of 500.00 feet, the chord azimuth and distance being

11. 168° 36' 192.52 feet; along the east side of Kealia Road (Government Road);
Thence along the east side of Kealia Road (Government Road) on a curve to the right with a radius of 780.00 feet, the chord azimuth and distance being

12. 157° 30' 112.85 feet; along the east side of Kealia Road (Government Road);
Thence along the east side of Kealia Road (Government Road) on a curve to the left with a radius of 900.00 feet, the chord azimuth and distance being

13. 167° 22' 30" 267.54 feet; along the east side of Kealia Road (Government Road);
Thence along the east side of Kealia Road (Government Road) on a curve to the right with a radius of 1000.00 feet, the chord azimuth and distance being

14. 267° 15' 4.46 feet; along the east side of Kealia Road (Government Road);

15. 349° 34' 69.11 feet along Lot 1, File Plan 505, Kealia Town Tract, Block A;

16. 336° 42' 217.42 feet along Lots 2, 3 and 4, File Plan 505, Kealia Town Tract, Block A;

17. 315° 44' 53.79 feet along Lot 4, File Plan 505, Kealia Town Tract, Block A;

18. 343° 30' 101.02 feet along Lots 4 and 5, File Plan 505, Kealia Town Tract, Block A;
19. 354° 03'  99.82  feet along Lot 5, File Plan 505, Kealia Town Tract, Block A;
20.  3°  29'   163.05  feet along Lot 6, File Plan 505, Kealia Town Tract, Block A;
21. 338° 56' 30"  193.15  feet along Lots 7 and 8, File Plan 505, Kealia Town Tract, Block A;
22. 305° 25' 30"  121.26  feet along Lots 9 and 10, File Plan 505, Kealia Town Tract, Block A;
23. 271° 37' 30"  157.50  feet along Lots 10, 11 and a 10-ft. wide drainage right-of-way, File Plan 505, Kealia Town Tract, Block A;
24. 324° 54'    115.41  feet along Lots 11 and 12, File Plan 505, Kealia Town Tract, Block A;
25. 300° 45'    319.25  feet along Lots 12, 13, 14, 15 and 16, File Plan 505, Kealia Town Tract, Block A to the point of beginning and containing an area of 6.523 acres, more or less.

Said above described parcel of land having been acquired by KEALIA PLANTATION COMPANY, LLC, a California limited liability company, as follows:

By DEED of KEALIA ISLAND SCHOOL HOLDINGS LLC, a Delaware limited liability company and CORNERSTONE HAWAII HOLDINGS LLC, a Colorado limited liability company, dated April 23, 2001, recorded as Document No. 2001-097098; and

By DEED of CORNERSTONE HAWAII HOLDINGS LLC, a Colorado limited liability company, dated April 23, 2001, recorded as Document No. 2001-097100.

TOGETHER WITH:

ALL that certain piece or parcel of land (being a portion of Royal Patent 5680, Land Commission Award 11216, Apana 6 to M. Kekauonohi and all of the following: Royal Patent 6905, Land Commission Award 10148, Apanas 1 and 2 to Mamaki, Royal Patent 6386, Land Commission Award 8834, Apanas 1 and 2 to Kalawaia, Royal Patent 6801, Land Commission Award 10906, Apanas 1 and 2 to Umiumi, Royal Patent 6387, Land Commission Award 1980, Apanas 1 and 2 to Puali, Royal Patent 6919, Land Commission Award 7966 to Keaonui, Royal Patent 6686, Land Commission Award 8060 to Hulialo, Royal Patent 7361, Land Commission Award 10628, Apanas 1 and 2 to Puali, Royal Patent 7610, Land Commission Award 10907, Apanas 1 and 2 to Naumiumi, Royal Patent 7360, Land Commission Award 8833, Apanas 1 and 2 to Kaia and Royal Patent 6735, Land Commission Award 10149, Apana 1 to Makuahine, Royal Patent 8357, Land Commission Award 8842, Apanas 1 and 2 to Kaawapupuole, a portion of Royal Patent 3919, Land Commission Award 3413-B to Kaaki and being a portion of the Certificate of Boundaries No. 1) situate, lying and being at Kealia, Kawaihau, Island and County of Kauai, State of Hawaii, being LOT D, and containing a gross area of 935.451 acres, more or less, as per survey of James R. Thompson, Land Surveyor, with Walter P. Thompson, Inc., dated August 4, 2005.

Beginning at the south corner of this parcel of land, the same being the intersection of Kuhio Highway, Federal Aid Project No. F 12(20) and the northerly bank of the Kapaa River, the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 20,419.47 feet South and 7,743.46 feet East and thence running by azimuths measured clockwise from true South:

Along the northerly bank of the Kapaa River in all its meandering for the next eight (8) courses, the direct azimuth and distance between point being

<table>
<thead>
<tr>
<th>Course</th>
<th>Azimuth</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>79° 00'</td>
<td>1058.00 feet</td>
</tr>
<tr>
<td>2.</td>
<td>163° 30'</td>
<td>986.50 feet</td>
</tr>
<tr>
<td>3.</td>
<td>160° 43'</td>
<td>855.00 feet</td>
</tr>
<tr>
<td>4.</td>
<td>63° 54'</td>
<td>956.50 feet</td>
</tr>
<tr>
<td>5.</td>
<td>119° 42'</td>
<td>1271.00 feet</td>
</tr>
<tr>
<td>6.</td>
<td>134° 00'</td>
<td>1037.50 feet</td>
</tr>
<tr>
<td>7.</td>
<td>144° 38'</td>
<td>952.80 feet</td>
</tr>
<tr>
<td>8.</td>
<td>147° 39'</td>
<td>487.24 feet</td>
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</tr>
<tr>
<td>9.</td>
<td>240° 04'</td>
<td>17.33</td>
</tr>
<tr>
<td>10.</td>
<td>149° 19'</td>
<td>152.19</td>
</tr>
<tr>
<td>11.</td>
<td>143° 43'</td>
<td>90.00</td>
</tr>
<tr>
<td>12.</td>
<td>132° 33'</td>
<td>120.00</td>
</tr>
<tr>
<td>13.</td>
<td>127° 30'</td>
<td>370.48</td>
</tr>
<tr>
<td>14.</td>
<td>213° 35'</td>
<td>44.96</td>
</tr>
<tr>
<td>15.</td>
<td>142° 43' 30&quot;</td>
<td>25.41</td>
</tr>
<tr>
<td>16.</td>
<td>146° 52'</td>
<td>143.88</td>
</tr>
<tr>
<td>17.</td>
<td>123° 07'</td>
<td>116.60</td>
</tr>
<tr>
<td>18.</td>
<td>120° 07'</td>
<td>97.02</td>
</tr>
<tr>
<td>19.</td>
<td>113° 07'</td>
<td>111.54</td>
</tr>
<tr>
<td>20.</td>
<td>105° 37'</td>
<td>128.04</td>
</tr>
<tr>
<td>21.</td>
<td>99° 37'</td>
<td>71.28</td>
</tr>
<tr>
<td>22.</td>
<td>58° 02'</td>
<td>166.32</td>
</tr>
<tr>
<td>23.</td>
<td>51° 47'</td>
<td>66.00</td>
</tr>
</tbody>
</table>
24. 40° 07' 137.90 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi;
25. 23° 37' 312.59 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi to the centerline of the Kapaa River and passing over a pipe at 271.00 feet;
26. 101° 43' 151.27 feet along the centerline of the Kapaa River and along the Kealia and Kapaa boundary;
27. 86° 53' 209.79 feet along the centerline of the Kapaa River and along the Kealia and Kapaa boundary;
28. 43° 16' 165.09 feet along the centerline of the Kapaa River and along the Kealia and Kapaa boundary to an existing concrete crossing;
29. 99° 45' 30.00 feet along the Kealia and Kapaa boundary and along Government Land;
30. 64° 30' 238.00 feet along the Kealia and Kapaa boundary and along Government Land;
31. 41° 30' 675.54 feet along the Kealia and Kapaa boundary and along Government Land and crossing over a paved road;
32. 136° 30' 26.44 feet along the remainder of R.P. 5680, L.C. Aw. 11216, Ap. 6 to M. Kekauonohi and crossing a paved road;
Thence along Roadway Parcel "C" on a curve to the right with a radius of 85.00 feet, the chord azimuth and distance being
33. 92° 05' 121.43 feet
34. 137° 40' 191.22 feet along Roadway Parcel "C";
Thence along Roadway Parcel "C" on a curve to the left with a
<table>
<thead>
<tr>
<th>Number</th>
<th>Azimuth</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.</td>
<td>124° 01'</td>
<td>136.87</td>
</tr>
<tr>
<td>36.</td>
<td>110° 22'</td>
<td>64.55</td>
</tr>
<tr>
<td>37.</td>
<td>119° 11'</td>
<td>148.68</td>
</tr>
<tr>
<td>38.</td>
<td>128° 00'</td>
<td>66.65</td>
</tr>
<tr>
<td>39.</td>
<td>155° 02' 30&quot;</td>
<td>122.75</td>
</tr>
<tr>
<td>40.</td>
<td>182° 05'</td>
<td>171.19</td>
</tr>
<tr>
<td>41.</td>
<td>166° 49' 30&quot;</td>
<td>402.65</td>
</tr>
<tr>
<td>42.</td>
<td>51° 34'</td>
<td>35.43</td>
</tr>
<tr>
<td>43.</td>
<td>169° 20'</td>
<td>295.99</td>
</tr>
<tr>
<td>44.</td>
<td>187° 06'</td>
<td>87.37</td>
</tr>
<tr>
<td>45.</td>
<td>185° 37'</td>
<td>104.32</td>
</tr>
<tr>
<td>46.</td>
<td>184° 08'</td>
<td>68.44</td>
</tr>
</tbody>
</table>

Radius of 290.00 feet, the chord azimuth and distance being feet;

feet along Roadway Parcel "C";

Thence along Roadway Parcel "C" on a curve to the right with a radius of 485.00 feet, the chord azimuth and distance being feet;

feet along Roadway Parcel "C";

Thence along Roadway Parcel "C" on a curve to the left with a radius of 135.00 feet, the chord azimuth and distance being feet;

feet along Roadway Parcel "C";

Thence along Roadway Parcel "C" on a curve to the left with a radius of 765.00 feet, the chord azimuth and distance being feet;

feet along Roadway Parcel "C";

Thence along Roadway Parcel "C" on a curve to the left with a radius of 485.00 feet, the chord azimuth and distance being feet;

feet along Roadway Parcel "C";

Thence along Roadway Parcel "C" on a curve to the left with a radius of 2015.00 feet, the chord azimuth and distance being feet;

feet along Roadway Parcel "C";
<table>
<thead>
<tr>
<th>No.</th>
<th>Azimuth</th>
<th>Chord Distance</th>
<th>Chord Azimuth</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>187° 54'</td>
<td>260.80</td>
<td>47° 18.70'</td>
</tr>
<tr>
<td>48</td>
<td>191° 40'</td>
<td>172.77</td>
<td>48° 19.10'</td>
</tr>
<tr>
<td>49</td>
<td>175° 35'</td>
<td>146.83</td>
<td>49° 17.50'</td>
</tr>
<tr>
<td>50</td>
<td>159° 30'</td>
<td>50.51</td>
<td>50° 15.90'</td>
</tr>
<tr>
<td>51</td>
<td>148° 35'</td>
<td>195.06</td>
<td>51° 14.80'</td>
</tr>
<tr>
<td>52</td>
<td>137° 40'</td>
<td>57.88</td>
<td>52° 13.70'</td>
</tr>
<tr>
<td>53</td>
<td>179° 55'</td>
<td>80.68</td>
<td>53° 19.90'</td>
</tr>
<tr>
<td>54</td>
<td>222° 10'</td>
<td>108.98</td>
<td>54° 22.20'</td>
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<tr>
<td>55</td>
<td>199° 10'</td>
<td>285.23</td>
<td>55° 19.90'</td>
</tr>
<tr>
<td>56</td>
<td>176° 10'</td>
<td>52.26</td>
<td>56° 17.60'</td>
</tr>
<tr>
<td>57</td>
<td>200° 43'</td>
<td>153.73</td>
<td>57° 20.00'</td>
</tr>
</tbody>
</table>
58. 225° 16' 204.44 feet along Roadway Parcel "C"; Thence along Roadway Parcel "C" on a curve to the left with a radius of 465.00 feet, the chord azimuth and distance being

59. 208° 15' 272.04 feet; 60. 191° 15' 393.09 feet along Roadway Parcel "C"; Thence along Roadway Parcel "C" on a curve to the right with a radius of 2185.00 feet, the chord azimuth and distance being

61. 198° 50' 576.70 feet; 62. 206° 25' 363.05 feet along Roadway Parcel "C"; Thence along Roadway Parcel "C" on a curve to the left with a radius of 3015.00 feet, the chord azimuth and distance being

63. 202° 31' 410.13 feet 64. 198° 37' 76.44 feet along Roadway Parcel "C"; Thence along Roadway Parcel "C" on a curve to the left with a radius of 615.00 feet, the chord azimuth and distance being

65. 183° 53' 312.81 feet; 66. 169° 09' 93.15 feet along Roadway Parcel "C"; Thence along Roadway Parcel "C" on a curve to the right with a radius of 985.00 feet, the chord azimuth and distance being

67. 176° 19' 30" 246.05 feet; 68. 183° 30' 62.40 feet along Roadway Parcel "C"; Thence along Roadway Parcel "C" on a curve to the left with a radius of 1315.00 feet, the chord azimuth and distance being
<p>| 69. 174° 36' | 406.89 feet; | 70. 165° 42' | 491.64 feet along Roadway Parcel &quot;C&quot;; Thence along Roadway Parcel &quot;C&quot; on a curve to the right with a radius of 185.00 feet, the chord azimuth and distance being |
| 71. 187° 16' | 136.01 feet; | 72. 208° 50' | 124.64 feet along Roadway Parcel &quot;C&quot; to Roadway Parcel &quot;A&quot;; Thence along Roadway Parcel &quot;A&quot; on a curve to the right with a radius of 30.00 feet, the radial azimuth at the point of curvature being 118° 50', the radial azimuth at the point of compound curvature being 222° 04' 56&quot;, the chord azimuth and distance being |
| 73. 260° 27' 28&quot; | 47.04 feet; | 74. 321° 32' 02&quot; | 59.12 feet; Thence along Roadway Parcel &quot;A&quot; on a curve to the left with a radius of 520.00 feet, the radial azimuth at the point of reverse curvature being 60° 59' 02&quot; the radial azimuth at the point of tangency being 31° 35', the chord azimuth and distance being |
| 75. 316° 17' 01&quot; | 263.91 feet; | 76. 301° 35' | 106.04 feet along Roadway Parcel &quot;A&quot;; |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Azimuth</th>
<th>Distance</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>307° 23' 30&quot;</td>
<td>400.76</td>
<td>Thence along Roadway Parcel &quot;A&quot; on a curve to the right with a radius of 1980.00 feet, the chord azimuth and distance being feet;</td>
</tr>
<tr>
<td>78</td>
<td>313° 12'</td>
<td>120.78</td>
<td>feet along Roadway Parcel &quot;A&quot;;</td>
</tr>
<tr>
<td>79</td>
<td>316° 36'</td>
<td>234.85</td>
<td>Thence along Roadway Parcel &quot;A&quot; on a curve to the right with a radius of 1980.00 feet, the chord azimuth and distance being feet;</td>
</tr>
<tr>
<td>80</td>
<td>320° 00'</td>
<td>400.66</td>
<td>feet along Roadway Parcel &quot;A&quot;;</td>
</tr>
<tr>
<td>81</td>
<td>311° 26'</td>
<td>184.71</td>
<td>Thence along Roadway Parcel &quot;A&quot; on a curve to the left with a radius of 620.00 feet, the chord azimuth and distance being feet;</td>
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<tr>
<td>82</td>
<td>302° 52'</td>
<td>157.68</td>
<td>feet along Roadway Parcel &quot;A&quot;;</td>
</tr>
<tr>
<td>83</td>
<td>308° 41'</td>
<td>269.58</td>
<td>Thence along Roadway Parcel &quot;A&quot; on a curve to the right with a radius of 1330.00 feet, the chord azimuth and distance being feet;</td>
</tr>
<tr>
<td>84</td>
<td>314° 30'</td>
<td>59.16</td>
<td>feet along Roadway Parcel &quot;A&quot;;</td>
</tr>
<tr>
<td>85</td>
<td>320° 04' 30&quot;</td>
<td>384.71</td>
<td>Thence along Roadway Parcel &quot;A&quot; on a curve to the right with a radius of 1980.00 feet, the chord azimuth and distance being feet;</td>
</tr>
<tr>
<td>86</td>
<td>325° 39'</td>
<td>172.06</td>
<td>feet along Roadway Parcel &quot;A&quot;;</td>
</tr>
<tr>
<td>87</td>
<td>310° 47' 30&quot;</td>
<td>317.97</td>
<td>Thence along Roadway Parcel &quot;A&quot; on a curve to the left with a radius of 620.00 feet, the chord azimuth and distance being feet;</td>
</tr>
</tbody>
</table>
88. 295° 56' 767.16 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 10020.00 feet, the chord azimuth and distance being

89. 294° 04' 652.78 feet along Roadway Parcel "A";

90. 292° 12' 356.78 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 580.00 feet, the chord azimuth and distance being

91. 306° 46' 291.75 feet along Roadway Parcel "A";

92. 321° 20' 253.22 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 520.00 feet, the chord azimuth and distance being

93. 311° 22' 30" 179.85 feet along Roadway Parcel "A";

94. 301° 25' 322.68 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 680.00 feet, the chord azimuth and distance being

95. 312° 12' 30" 254.64 feet along Roadway Parcel "A";

96. 323° 00' 167.22 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 1020.00 feet, the chord azimuth and distance being

97. 321° 03' 30" 69.12 feet along Roadway Parcel "A";

98. 319° 07' 290.14 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 1180.00 feet, the chord azimuth and distance being
99. 324° 32'  222.78 feet;  
100. 329° 57'  165.80 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 1520.00 feet, the chord azimuth and distance being

101. 318° 16' 30"  615.17 feet;
102. 306° 36' 99  62 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a radius of 480.00 feet, the chord azimuth and distance being

103. 313° 12' 30"  110.48 feet;
104. 319° 49'  77.80 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a radius of 380.00 feet, the chord azimuth and distance being

105. 335° 41'  207.78 feet;
106. 351° 33'  15.86 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 495.00 feet, the chord azimuth and distance being

107. 325° 32' 30"  434.12 feet;
108. 299° 32'  376.71 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 420.00 feet, the chord azimuth and distance being

109. 284° 42' 30"  214.93 feet;
110. 269° 53'  28.19 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a
radius of 230.00 feet, the chord azimuth and distance being

111. 293°  18'    182.81 feet;  
112. 316°  43'    159.07 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 395.00 feet, the chord azimuth and distance being

113. 296°  19'    275.37 feet;  
114. 275°  55'    123.53 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a radius of 230.00 feet, the chord azimuth and distance being

115. 296°  11' 30"  159.40 feet;  
116. 316°  28'    130.88 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a radius of 180.00 feet, the chord azimuth and distance being

117. 336°  51' 30"  125.44 feet;  
118. 357°  15'    194.59 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 820.00 feet, the chord azimuth and distance being

119. 347°  22' 30"  281.26 feet;  
120. 337°  30'    112.85 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the right with a radius of 460.00 feet, the chord azimuth and distance being

121. 348°  36'    177.12 feet;  
122. 359°  42'    157.00 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 500.00 feet, the chord azimuth and distance being

123. 339° 15' 349.39 feet;

124. 318° 48' 83.00 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 250.00 feet, the chord azimuth and distance being

125. 348° 38' 248.74 feet;

126. 18° 28' 139.00 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the left with a radius of 280.00 feet, the chord azimuth and distance being

127. 357° 59' 195.96 feet;

128. 337° 30' 403.00 feet along Roadway Parcel "A";

Thence along Roadway Parcel "A" on a curve to the right with a radius of 880.00 feet, the chord azimuth and distance being

129. 339° 50' 71.65 feet;

130. 342° 10' 150.62 feet along Roadway Parcel "A";

131. 18° 04' 30" 954.17 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31[1]) and (F.A.P. No. F-12[20]);

132. 108° 04' 30" 10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);

133. 18° 04' 30" 150.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);

134. 288° 04' 30" 10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);
135. 18° 04' 30" 340.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);

136. 69° 25' 25.61 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]);

137. 18° 04' 30" 152.61 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-12[20]) to the point of beginning and containing a gross area of 935.451 acres.

EXCLUDING THEREFROM the following land and areas:

Royal Patent 7360, Land Commission Award 8833, Apana 1 to Kiaipa containing 0.220 acre.
Royal Patent 7360, Land Commission Award 8833, Apana 2 to Kiaipa containing 0.660 acre.
Royal Patent 6735, Land Commission Award 10149, Apana 1 to Makuahine containing an area of 1.00 acre.
Royal Patent 8357, Land Commission Award 8842, Apana 1 to Kaawapupuole containing an area of 0.590 acre.
Royal Patent 8357, Land Commission Award 8842, Apana 2 to Kaawapupuole containing an area of 0.400 acre.
Royal Patent 6387, Land Commission Award 1980, Apana 2 to Puali containing an area of 1.210 acres.
Royal Patent 7361, Land Commission Award 10628, Apana 1 to Puhi containing an area of 0.510 acre.
Royal Patent 7361, Land Commission Award 10628, Apana 2 to Puhi containing an area of 0.510 acre.
Royal Patent 6905, Land Commission Award 10148, Apana 1 to Mamaki containing an area of 0.510 acre.
Royal Patent 6905, Land Commission Award 10148, Apana 2 to Mamaki containing an area of 1.070 acre.

and leaving a net area of 928.771 acres.

BEING THE PREMISES ACQUIRED BY DEED

GRANTOR : KEALIA MAUKA HOLDINGS LLC, a Delaware limited liability company

GRANTEE : KEALIA PLANTATION COMPANY, LLC, a California limited liability company

DATED : April 23, 2001
RECORDED : Document No. 2001-097096

Subject to any and all liens and/or encumbrances of record.
TOGETHER WITH:

FOURTH- TMK: (4) 4-7-004-001

ALL that certain piece or parcel of land (being all of Royal Patent 7149, Land Commission Award 10689 to Puukuakahi and Royal Patent 6814, Land Commission Award 10660 to Pakaa and portions of Royal Patent 5680, Land Commission Award 11216, Apana 6 to M. Kekauonohi, Grant 3158 to E. Krull and Certificate of Boundaries No. 1) situate, lying and being at Kealia, Kawaihau, Island and County of Kauai, State of Hawaii.

Beginning at the northeast corner of this parcel of land, the same being on the boundary of the lands of Kealia and Kamalomalo and on the westerly side of Kuhio Highway, Federal Aid Project No. F-31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,480.38 feet South and 9,951.24 feet East and thence running by azimuths measured clockwise from true South:

1. $340^\circ 51' 12''$ 324.50 feet; along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]) on a curve to the right with a radius of 3930.00 feet, the radial azimuth to the point of curvature being $258^\circ 29' 14''$ and to the point of tangency being $263^\circ 13' 10''$, the chord azimuth and distance being

2. $263^\circ 13' 10''$ 20.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

3. $357^\circ 31'$ 591.95 feet; Thence along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]) on a curve to the right with a radius of 3950.00 feet, the radial azimuth at the point of curvature being $263^\circ 13' 10''$ and at the point of tangency being $271^\circ 48' 50''$, the chord azimuth and distance being

4. $91^\circ 48' 50''$ 10.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

Thence along the westerly side of Kuhio Highway, (F.A.P. No.
<table>
<thead>
<tr>
<th></th>
<th>6° 19' 55&quot;</th>
<th>620.73</th>
<th>Feet;</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>10° 51'</td>
<td>317.79</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
<tr>
<td>6.</td>
<td>280° 51'</td>
<td>20.00</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
<tr>
<td>7.</td>
<td>10° 51'</td>
<td>1600.00</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
<tr>
<td>8.</td>
<td>100° 51'</td>
<td>10.00</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
<tr>
<td>9.</td>
<td>10° 51'</td>
<td>450.00</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
<tr>
<td>10.</td>
<td>100° 51'</td>
<td>20.00</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
<tr>
<td>11.</td>
<td>280° 51'</td>
<td>400.00</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
<tr>
<td>12.</td>
<td>10° 51'</td>
<td>10.00</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
<tr>
<td>13.</td>
<td>10° 51'</td>
<td>200.00</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
<tr>
<td>14.</td>
<td>280° 51'</td>
<td>10.00</td>
<td>Feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);</td>
</tr>
</tbody>
</table>
16. 10° 51' 582.76 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

17. 14° 27' 45" 749.80 feet; along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

18. 18° 04' 30" 910.64 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

19. 108° 04' 30" 20.00 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

20. 18° 04' 30" 500.62 feet along the westerly side of Kuhio Highway, (F.A.P. No. F-31 [1]);

21. 120° 45' 389.29 feet along Kaao Road and Lots 17, 18, 19, 20 and 21, File Plan 505, Kealia Town Tract, Block A; Thence along Lot 21, a 10-ft. wide drainage right-of-way, Lots 22, 23, 24, and a portion of a 40-ft. wide roadway, File Plan 505, Kealia Town Tract, Block A on a curve to the right with a radius of 280.00 feet, the chord azimuth and distance being

22. 146° 07' 30" 239.98 feet; along a 40-ft. wide roadway and Lots 25, 26, 27 and 28, File Plan 505, Kealia Town Tract, Block A; Thence along Lots 28, 29, 30 and 31, File Plan 505, Kealia Town Tract, Block A on a curve to the left with a radius of 360.00 feet, the chord azimuth and distance being
24. 148° 30' 50" 281.17 feet;  
25. 215° 31' 40" 140.00 feet along Lot 36, File Plan 505, Kealia Town Tract, Block A and along Hopoe Road;  
Thence along Hopoe Road on a curve to the left with a radius of 500.00 feet, the chord azimuth and distance being  
26. 123° 14' 09" 39.99 feet;  
27. 30° 56' 38" 10.00 feet along Hopoe Road;  
Thence along Hopoe Road on a curve to the left with a radius of 490.00 feet, the chord azimuth and distance being  
28. 104° 28' 19" 277.88 feet;  
29. 88° 00' 2.57 feet along Hopoe Road;  
Thence along Hopoe Road on a curve to the right with a radius of 25.00 feet, the chord azimuth and distance being  
30. 138° 16' 30" 38.46 feet;  
31. 98° 33' 30.00 feet along Roadway Parcel "A";  
32. 8° 33' 27.51 feet along Roadway Parcel "A";  
33. 136° 28' 173.31 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A" on a curve to the left with a radius of 270.00 feet, the chord azimuth and distance being  
34. 116° 11' 30" 187.12 feet;  
35. 95° 55' 123.53 feet along Roadway Parcel "A";  
Thence along Roadway Parcel "A" on a curve to the right with a radius of 355.00 feet, the chord azimuth and distance being  
36. 116° 19' 247.49 feet;
37. 136° 43' 159.07 feet along Roadway Parcel "A"; Thence along Roadway Parcel "A" on a curve to the left with a radius of 270.00 feet, the chord azimuth and distance being

38. 113° 18' 214.60 feet; 214.60 feet along Roadway Parcel "A";

39. 89° 53' 28.19 feet; 28.19 feet along Roadway Parcel "A";

40. 104° 42' 30" 194.46 feet; 194.46 feet along Roadway Parcel "A";

41. 119° 32' 376.71 feet; 376.71 feet along Roadway Parcel "A";

42. 145° 32' 30" 399.04 feet; 399.04 feet along Roadway Parcel "A";

43. 171° 33' 15.86 feet; 15.86 feet along Roadway Parcel "A";

44. 155° 41' 229.66 feet; 229.66 feet along Roadway Parcel "A";

45. 139° 49' 77.80 feet; 77.80 feet along Roadway Parcel "A";

46. 133° 12' 30" 119.69 feet; 119.69 feet along Roadway Parcel "A";

47. 126° 36' 99.62 feet; 99.62 feet along Roadway Parcel "A"; Thence along Roadway Parcel "A" on a curve to the right with a radius of 1480.00 feet, the chord azimuth and distance being
48. 138° 16' 30"  598.99 feet; 
49. 149° 57'  165.80 feet along Roadway Parcel "A"; 
    Thence along Roadway Parcel "A" on a curve to the left with a radius of 1220.00 feet, the chord azimuth and distance being feet; 
50. 144° 32'  230.33 feet; 
51. 139° 07'  290.14 feet along Roadway Parcel "A"; 
    Thence along Roadway Parcel "A" on a curve to the right with a radius of 980.00 feet, the chord azimuth and distance being feet; 
52. 141° 03' 30"  66.41 feet; 
53. 143° 00'  167.22 feet along Roadway Parcel "A"; 
    Thence along Roadway Parcel "A" on a curve to the left with a radius of 720.00 feet, the chord azimuth and distance being feet; 
54. 132° 12' 30"  269.62 feet; 
55. 121° 25'  322.68 feet along Roadway Parcel "A"; 
    Thence along Roadway Parcel "A" on a curve to the right with a radius of 480.00 feet, the chord azimuth and distance being feet; 
56. 131° 22' 30"  166.01 feet; 
57. 141° 20'  252.22 feet along Roadway Parcel "A"; 
    Thence along Roadway Parcel "A" on a curve to the left with a radius of 620.00 feet, the chord and azimuth and distance being feet; 
58. 126° 46'  311.87 feet; 
59. 112° 12'  35.63 feet along Roadway Parcel "A"; 
    Thence along Roadway Parcel "A" on a curve to the right with a
radius of 9980.00 feet, the chord azimuth and distance being

60. 114° 04' 650.17 feet; 65° 04' 650.17 feet along Roadway Parcel "A";

61. 115° 56' 767.16 feet; Thence along Roadway Parcel "A" on a curve to the right with a radius of 580.00 feet, the chord azimuth and distance being

62. 130° 47' 30" 297.46 feet; 63. 145° 39' 172.06 feet along Roadway Parcel "A";

63. 145° 39' 172.06 feet; Thence along Roadway Parcel "A" on a curve to the left with a radius of 2020.00 feet, the chord azimuth and distance being

64. 140° 04' 30" 392.48 feet; 65. 134° 30' 59.16 feet along Roadway Parcel "A";

65. 134° 30' 59.16 feet; Thence along Roadway Parcel "A" on a curve to the left with a radius of 1370.00 feet, the chord azimuth and distance being

66. 128° 41' 277.69 feet; 67. 122° 52' 157.68 feet along Roadway Parcel "A";

67. 122° 52' 157.68 feet; Thence along Roadway Parcel "A" on a curve to the right with a radius of 580.00 feet, the chord azimuth and distance being

68. 131° 26' 172.79 feet; 69. 140° 00' 400.66 feet along Roadway Parcel "A";

69. 140° 00' 400.66 feet; Thence along Roadway Parcel "A" on a curve to the left with a radius of 2020.00 feet, the chord azimuth and distance being

70. 136° 36' 239.60 feet; 71. 133° 12' 120.78 feet along Roadway Parcel "A";
Thence along Roadway Parcel "A" on a curve to the left with a radius of 2020.00 feet, the chord azimuth and distance being 72. 127° 23' 30" 408.85 feet; 73. 121° 35' 106.04 feet along Roadway Parcel "A"; 74. 136° 17' 01" 243.61 feet; 75. 138° 51' 38" 92.41 feet; 76. 167° 47' 07" 39.40 feet; 77. 208° 50' 609.99 feet along Roadway Parcel "B"; 78. 216° 35' 292.62 feet;
79. 224° 20' 442.06 feet along Roadway Parcel "B";

Thence along Roadway Parcel "B" on a curve to the right with a radius of 1485.00 feet, the chord azimuth and distance being

80. 228° 10' 198.56 feet along Roadway Parcel "B";

81. 232° 00' 79.21 feet along Roadway Parcel "B";

Thence along Roadway Parcel "B" on a curve to the left with a radius of 1015.00 feet, the chord azimuth and distance being

82. 230° 17' 30" 60.52 feet along Roadway Parcel "B";

83. 228° 35' 212.26 feet along Roadway Parcel "B";

Thence along Roadway Parcel "B" on a curve to the right with a radius of 285.00 feet, the chord azimuth and distance being

84. 247° 47' 30" 187.53 feet along Roadway Parcel "B";

85. 267° 00' 27.78 feet along Roadway Parcel "B";

Thence along Roadway Parcel "B" on a curve to the left with a radius of 565.00 feet, the chord azimuth and distance being

86. 247° 34' 375.96 feet along Roadway Parcel "B";

87. 228° 08' 313.32 feet along Roadway Parcel "B";

88. 270° 19' 56.25 feet along the Government Land of Kamalomalo;

89. 265° 34' 635.30 feet along the Government Land of Kamalomalo;

90 287° 46' 205.50 feet along the Government Land of Kamalomalo;

91. 310° 40' 30" 1006.10 feet along the Government Land of Kamalomalo;
92. 255° 59' 30" 805.30 feet along the Government Land of Kamalomaloo;
93. 281° 50' 428.60 feet along the Government Land of Kamalomaloo;
94. 307° 57' 351.80 feet along the Government Land of Kamalomaloo;
95. 293° 03' 391.30 feet along the Government Land of Kamalomaloo;
96. 279° 29' 249.90 feet along the Government Land of Kamalomaloo;
97. 273° 37' 331.40 feet along the Government Land of Kamalomaloo;
98. 265° 55' 440.30 feet along the Government Land of Kamalomaloo;
99. 296° 02' 1097.00 feet along the Government Land of Kamalomaloo;
100. 311° 02' 163.00 feet along the Government Land of Kamalomaloo;
101. 288° 16' 180.80 feet along the Government Land of Kamalomaloo;
102. 298° 32' 899.60 feet along the Government Land of Kamalomaloo;
103. 297° 54' 498.30 feet along the Government Land of Kamalomaloo;
104. 283° 02' 540.50 feet along the Government Land of Kamalomaloo;
105. 267° 57' 279.83 feet along the Government Land of Kamalomaloo to the point of beginning and containing a gross area of 1075.599 acres.

EXCLUDING THEREFROM Royal Patent 7149, Land Commission Award 10689 to Puukuakahi containing an area of 2.980 acres.

and leaving a net area of 1072.619 acres.

TOGETHER WITH easements as shown on the Right-of-Way Map of the Kauai Belt Road, Federal Aid Project No. F 31 (1), filed in the Office of the Superintendent of Public Works of the State of Hawaii; as reserved
in that certain instrument dated August 29, 1955, recorded in Liber 3015 at Page 326, said easements being more particularly described as follows:

(A) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 4 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 17,295.47 feet south and 8,899.79 feet east, thence running by azimuth measured clockwise from true South:

1. 108° 04' 30"  140.00 feet and containing an area of 1,400 square feet, more or less.

(B) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 5 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 17,023.07 feet south and 8,967.66 feet east, thence running by azimuth measured clockwise from true South:

1. 108° 04' 30"  100.00 feet and containing an area of 2,000 square feet, more or less.
All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 6 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 16,477.10 feet south and 9,145.85 feet east, thence running by azimuth measured clockwise from true South:

1. 125° 30' 104.81 feet and containing an area of 2,096 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 7 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 16,272.06 feet south and 9,212.77 feet east, thence running by azimuth measured clockwise from true South:

1. 108° 04' 30" 100.00 feet and containing an area of 1,000 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680,
Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 8, for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, and thus bounded and described as follows:

Beginning at the southeast corner of this piece of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 15,801.15 feet south and 9,347.31 feet east, thence running by azimuths measured clockwise from true South:

1. On a curve to the right with a radius of 560.00 feet, the chord azimuth and distance being:
   
   \[
   \begin{array}{ccc}
   \text{azimuth} & \text{and} \\
   \text{distance} & \text{being:} & \text{feet;}
   \end{array}
   \]
   
   \[
   \begin{array}{c}
   59° \ 08' \ 32" \ 141.33 \text{ feet;}
   \end{array}
   \]

2. Thence along the Northwest side of Kauai Belt Road, Project No. F 31 (1), on a curve to the left with a radius of 5950.00 feet, the chord azimuth and distance being:

   \[
   \begin{array}{ccc}
   \text{azimuth} & \text{and} & \text{distance} & \text{being:}
   \end{array}
   \]
   
   \[
   \begin{array}{c}
   194° \ 21' \ 01" \ 48.75 \text{ feet;}
   \end{array}
   \]

3. Thence on a curve to the left with a radius of 522.41 feet, the chord azimuth and distance being:

   \[
   \begin{array}{ccc}
   \text{azimuth} & \text{and} & \text{distance} & \text{being:}
   \end{array}
   \]
   
   \[
   \begin{array}{c}
   234° \ 44' \ 26" \ 151.90 \text{ feet;}
   \end{array}
   \]

4. Thence along the Southeast side of Kauai Belt Road, Project No. F 31 (1), on a curve to the right with a radius of 6050.00 feet, the chord azimuth and distance being:

   \[
   \begin{array}{ccc}
   \text{azimuth} & \text{and} & \text{distance} & \text{being:}
   \end{array}
   \]
   
   \[
   \begin{array}{c}
   13° \ 19' \ 38" \ 64.18 \text{ feet to the point of beginning and containing an area of 5,516 square feet, more or less.}
   \end{array}
   \]
(F) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 9 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 15,452.56 feet south and 9,421.38 feet east, thence running by azimuth measured clockwise from true South:

1. 100° 51' 100.00 feet and containing an area of 1,000 square feet, more or less.

(G) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Grant Number 3158 to E. Krull) situate, lying and being at Kumukumu, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 10 for drainage purposes, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 14,443.45 feet south and 9,624.97 feet east, thence running by azimuth measured clockwise from true South:

1. 141° 00' 143.91 feet and containing an area of 1,450 square feet, more or less.

(H) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Grant Number 3158 to E. Krull) situate, lying and being at Kumukumu, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 11 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and
extending for a distance of 5.00 feet on each side of the
centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip
of land, on the southeast side of Kauai Belt Road, Federal
Aid Project No. F 31 (1), the coordinates of said point of
beginning referred to Government Survey Triangulation
Station "KIKOO" being 14,061.76 feet south and 9,677.76
feet east, thence running by azimuth measured clockwise
from true South:

1. $133^\circ\ 40'$ 107.09 feet and containing
an
area of 1,071
square
feet, 
more or less.

(I) All of that certain parcel of land (being a portion of the
land described in and covered by Royal Patent Grant Number
3158 to E. Krull) situate, lying and being at Kumukumu,
Puna, Island and County of Kauai, State of Hawaii, being
EASEMENT 12 for Industrial Track crossing, trucking and
other means of vehicular transportation, over and across
Kauai Belt Road, and thus bounded and described as follows:

Beginning at the southeast corner of this piece of land, on
the southeast side of Kauai Belt Road, Federal Aid Project
No. F 31 (1), the coordinates of said point of beginning
referred to Government Survey Triangulation Station "KIKOO"
being 13,785.93 feet south and 9,730.63 feet east, thence
running by azimuths measured clockwise from true South:

1. $143^\circ\ 10'$ 108.19 feet;
2. $190^\circ\ 51'$ 42.04 feet along the Northwest
side of Kauai Belt
Road, Project
No. F 31 (1);
3. $323^\circ\ 10'$ 108.19 feet;
4. $10^\circ\ 51'$ 42.04 feet along the Southeast
side of Kauai Belt
Road, Project
No. F 31 (1) to
the
point of beginning
and containing an area
of 3,364 square feet,
more or less.

(J) All of that certain parcel of land (being a portion of the
land described in and covered by Royal Patent Grant Number
3158 to E. Krull) situate, lying and being at Kumukumu,
Puna, Island and County of Kauai, State of Hawaii, being 
EASEMENT 13 for concrete Syphon, under and across Kauai 
Belt Road, being a strip of land 10.00 feet wide, and 
extending for a distance of 5.00 feet on each side of the 
centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip 
of land, on the southeast side of Kauai Belt Road, Federal 
Aid Project No. F 31 (1), the coordinates of said point of 
beginning referred to Government Survey Triangulation 
Station "KIKOO" being 13,514.93 feet south and 9,782.57 
feet east, thence running by azimuth measured clockwise 
from true South:

1. 100° 51' 
80.00 feet and containing an 
area of 800 square 
feet, more or 
less.

(K) All of that certain parcel of land (being a portion of the 
land described in and covered by Royal Patent Number 5680, 
Land Commission Award Number 11216, Apana 6 to M. 
Kekauonohi (Certificate of Boundaries No. 1)), situate, 
lying and being at Kealia, Puna, Island and County of 
Kauai, State of Hawaii, being EASEMENT 14 for concrete 
Syphon, under and across Kauai Belt Road, being a strip of 
land 10.00 feet wide, and extending for a distance of 5.00 
feet on each side of the centerline, and thus bounded and 
described as follows:

Beginning at the east end of the center line of this strip 
of land, on the southeast side of Kauai Belt Road, Federal 
Aid Project No. F 31 (1), the coordinates of said point of 
beginning referred to Government Survey Triangulation 
Station "KIKOO" being 12,774.70 feet south and 9,924.45 
feet east, thence running by azimuth measured clockwise 
from true South:

1. 100° 51' 
80.00 feet and containing an 
area of 800 square 
feet, more or 
less.

(L) All of that certain parcel of land (being a portion of the 
land described in and covered by Royal Patent Number 5680, 
Land Commission Award Number 11216, Apana 6 to M. 
Kekauonohi (Certificate of Boundaries No. 1)) situate, 
lying and being at Kealia, Puna, Island and County of 
Kauai, State of Hawaii, being EASEMENT 15 for Industrial 
Track crossing, trucking and other means of vehicular 
transportation, over and across Kauai Belt Road, being a 
strip of land 20.00 feet wide, and extending for a distance
of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 12,386.47 feet south and 9,998.86 feet east, thence running by azimuth measured clockwise from true South:

1. $100^\circ$ 51' 80.00 feet and containing an area of 1,600 square feet, more or less.

(M) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)), situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 16 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 12,198.71 feet south and 10,055.21 feet east, thence running by azimuth measured clockwise from true South:

1. $100^\circ$ 51' 120.00 feet and containing an area of 1,200 square feet, more or less.

(N) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 17 for drainage purposes, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:
Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 11,695.61 feet south and 10,137.39 feet east, thence running by azimuth measured clockwise from true South:

1. 96° 05' 30" 120.00 feet and containing an area of 1,200 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 18 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the southeast side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 11,670.36 feet south and 10,140.01 feet east, thence running by azimuth measured clockwise from true South:

1. 95° 44' 120.00 feet and containing an area of 2,400 square feet, more or less.

All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 19 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the east side of Kauai Belt Road, Federal Aid...
Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,853.73 feet south and 10,139.46 feet east, thence running by azimuth measured clockwise from true South:

1. 110° 00' 122.59 feet and containing an area of 2,452 square feet, more or less.

(Q) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)), situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 20 for concrete Syphon, under and across Kauai Belt Road, being a strip of land 10.00 feet wide, and extending for a distance of 5.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the east side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,816.46 feet south and 10,135.49 feet east, thence running by azimuth measured clockwise from true South:

1. 124° 30' 174.01 feet and containing an area of 1,740 square feet, more or less.

(R) All of that certain parcel of land (being a portion of the land described in and covered by Royal Patent Number 5680, Land Commission Award Number 11216, Apana 6 to M. Kekauonohi (Certificate of Boundaries No. 1)) situate, lying and being at Kealia, Puna, Island and County of Kauai, State of Hawaii, being EASEMENT 21 for Industrial Track crossing, trucking and other means of vehicular transportation, over and across Kauai Belt Road, being a strip of land 20.00 feet wide, and extending for a distance of 10.00 feet on each side of the centerline, and thus bounded and described as follows:

Beginning at the east end of the center line of this strip of land, on the east side of Kauai Belt Road, Federal Aid Project No. F 31 (1), the coordinates of said point of beginning referred to Government Survey Triangulation Station "KIKOO" being 10,751.45 feet south and 10,127.74
feet east, thence running by azimuth measured clockwise from true South:

1. 90° 00' 131.09 feet and containing an area of 2,622 square feet, more or less.

BEING THE PREMISES ACQUIRED BY DEED

GRANTOR : KEALIA MAUKA HOLDINGS LLC, a Delaware limited liability company

GRANTEE : KEALIA PLANTATION COMPANY, LLC, a California limited liability company

DATED : April 23, 2001
RECORDED : Document No. 2001-097096

TOGETHER WITH:

Faith and Roy,
This is the first WUR from Kealia Water Company for its public water supply wells in Kealia Village. I have a couple questions:

- Do we want them to also submit a hard copy?
- Do we want to ask for reports going back to when the wells were completed?
- Do we want to ask them to submit reports for Jan-July 2008?

Please let me know your preferences and I'll contact the operator to follow up.

-Denise

--- Forwarded by Denise E Mills/DLNR/StateHIUS on 09/24/2008 02:11 PM ---
"Leila Kamakele" <lelia@aquaeengineers.com> To <Denise.E.Mills@hawaiigov> 09/24/2008 11:02 AM
Subject FW:

Hi Denise,

Ken Shinsato our operator for kealia water system did the monthly report. Please let me know if changes need to made.

Thanks
Leila

Talked to Ken Shinsato (Aqua Engineers) about reporting - he will file monthly water pumpage as far back as they can go/ have records for the new wells (1A & 2A) -

Ken Shinsato
Aqua Engineers
3560 Koloa Rd
Kaua'i, HI 96734
(808)240-2207

August 08 Water Commission Monthly Ground water use report.doc
Name: 
Company: Kealia Water Company Holdings, LLC 
Address: 
Telephone No.: Fax No.: 
Report Month: August Year: 2008

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call (808) 587-3868.

<table>
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<th>Well Number</th>
<th>Well Name</th>
<th>Start Date</th>
<th>End Date</th>
<th>Total Use (gallons)</th>
<th>Run Time</th>
<th>Flow (gpm)</th>
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<td>Kealia Makai Well 1A</td>
<td>08/01/08</td>
<td>08/31/08</td>
<td>2230200</td>
<td>120</td>
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<td>Kealia Makai Well 2A</td>
<td>08/01/08</td>
<td>08/31/08</td>
<td>747600</td>
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<td>22.7</td>
</tr>
</tbody>
</table>

*Flow meter, electrical consumption, weir or flume, not metered (estimated).
**Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):
Flows are estimated by calculating pump run time multiplied by 700 gallons per minute.
Chloride test taken with Hach 8-P chloride kit.
We don't have a way to measure the water level yet.

Submitted by (print): Ken Shinsato 
Title: operator
Signature: 
Date: 9/23/08

GWUR-MON FORM (06/10/2004)
Mr. Paul Alston  
Ms. Elizabeth Haws Connally  
Kealia Water Company Holdings, LLC  
1001 Bishop Street, 18th Floor  
Honolulu, HI 96813  

Dear Mr. Alston and Ms. Connally:

Certificate of Well Construction Completion  
Well Nos. 0618-09 and -10 (TMK (4) 4-7-003:002)

Thank you for providing the ownership records for the subject wells in response to our request for information. We received your information on September 8, 2008; we have updated our records and will retain a copy of the documents you sent for future reference, as needed.

On March 8, 2002, the Commission on Water Resource Management (Commission) accepted the Well Completion Report Part I for Kealia Wells 1A and 2A (Well Nos. 0618-09 and -10), which was submitted by Oasis Water Systems, Inc., as required by the well construction permit. Since 2004, the Commission has issued certificates of well construction completion for wells completed in accordance with the Hawaii Well Construction & Pump Installation Standards (HWCPIS). This certificate of well construction completion describes your obligations as a well owner and/or operator and will help you comply with the State Water Code (HRS Chapter 174C), Hawaii Administrative Rules §13-168, and the HWCPIS.

We are pleased to formally welcome you to the community of well owners and ground water users in Hawaii. To protect Hawaii’s natural ground water resources for the benefit of all, the following requirements apply to the use of your well:

1. Before this well can be pumped on a regular basis, a certificate of pump installation completion must be obtained.
2. If the well is not in use it must be properly capped.
3. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.
4. In the event that the well operator and/or landowner changes, the Commission shall be notified prior to the change.
5. In the event the benchmark in the concrete base of the well is altered in any way, an updated version of the Well Elevation page of the Well Completion Report Part I shall be submitted to the Commission. If a licensed surveyor had estimated the original benchmark elevation then a licensed surveyor must establish the new benchmark elevation. The Well Elevation portion of the Well Completion Report Part I can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrmlforms.htm.
6. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. The authorization to drill a well and/or install a pump shall not constitute a determination of correlative water rights. The landowner and well operator are notified that the quantity of water allowed to be taken from the well and/or the pump capacity could be reduced by the Commission in the future.

Because ground water in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions, or any other provision of the Hawaii Administrative Rules, may be subject to fines of up to $5,000/day. The Commission needs your help and asks that you to do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

If you have any questions, please contact Denise Mills of the Commission staff at 587-0251 or toll-free at 274-3141 (Kauai), extension 70251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

DM:ss

c: Kauai Department of Water
Oasis Water Systems
Mr. Paul Alston  
Ms. Elizabeth Haws Connally  
Kealia Water Company Holdings, LLC  
1001 Bishop Street, 18th Floor  
Honolulu, HI 96813

Dear Mr. Alston and Ms. Connally:

Certificate of Pump Installation Completion for Well No. 0618-09 (TMK (4) 4-7-003:002)

On March 8, 2002, we accepted the Well Completion Report Part II for Well No. 0618-09 (Kealia Well 1A), which was prepared and submitted by Oasis Water Systems as required by your pump installation permit. Since 2004, the Commission has issued certificates of pump installation completion for well work done in accordance with the Hawaii Well Construction & Pump Installation Standards (HWCPIS). This certificate describes your obligations as a well owner and/or well operator and will help you comply with the provisions of the Hawaii Water Code (HRS Chapter 174C), Hawaii Administrative Rules § 13-168, and the HWCPIS.

This certificate of pump installation completion allows you to commence pumping your well for reasonable and beneficial water use. To protect Hawaii’s natural ground water resources for the benefit of all, the following requirements apply to the use of your well:

1. If the well is not in use it must be properly capped.

2. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with §13-168-12(f), HAR prior to any well sealing or plugging work.

3. In the event that the well operator and/or landowner changes, the Commission shall be notified prior to the change.

4. In the event the benchmark in the concrete base of the well is altered in any way, an updated version of the Well Elevation page of the Well Completion Report Part I shall be submitted to the Commission. If a licensed surveyor had estimated the original benchmark elevation then a licensed surveyor must establish the new benchmark elevation. The Well Elevation portion of the Well Completion Report Part I can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/forms.htm.

5. Your approved pump has a capacity of 650 gallons per minute at a head of 225 feet. In the future, pump replacements of equal or lesser capacity will not require a permit from the Commission, but will require the submission of a Well Completion Report Part II by the licensed pump installer within 60 days after the work is completed. If the capacity of the replacement pump is more than the existing pump, you will need to apply for a new pump installation permit.
6. The landowner shall cause the well operator to maintain the installed meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides, temperature, and water levels in the well. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR. Blank water use report forms are also available at www.hawaii.gov/dlnr/cwrm/resources_permits.htm

7. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. The authorization to drill a well and/or install a pump shall not constitute a determination of correlative water rights. The landowner and well operator are notified that the quantity of water taken from the well and/or the pump capacity could be reduced by the Commission in the future.

Because ground water in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions, or any other provision of the Hawaii Administrative Rules, may be subject to fines of up to $5,000/day. The Commission needs your help and asks that you to do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

If you have any questions, please contact Denise Mills of the Commission staff at 587-0251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

DM:ss
Encl: Monthly Ground Water Use Report Form

c: Kauai Department of Water
September 19, 2008

Mr. Paul Alston
Ms. Elizabeth Haws Connally
Kealia Water Company Holdings, LLC
1001 Bishop Street, 18th Floor
Honolulu, HI 96813

Dear Mr. Alston and Ms. Connally:

Certificate of Pump Installation Completion for Well No. 0618-10 (TMK (4) 4-7-003:002)

On March 8, 2002, we accepted the Well Completion Report Part II for Well No. 0618-10 (Kealia Well 2A), which was prepared and submitted by Oasis Water Systems as required by your pump installation permit. Since 2004, the Commission has issued certificates of pump installation completion for well work done in accordance with the Hawaii Well Construction & Pump Installation Standards (HWCPIS). This certificate describes your obligations as a well owner and/or well operator and will help you comply with the provisions of the Hawaii Water Code (HRS Chapter 174C), Hawaii Administrative Rules § 13-168, and the HWCPIS.

This certificate of pump installation completion allows you to commence pumping your well for reasonable and beneficial water use. To protect Hawaii’s natural ground water resources for the benefit of all, the following requirements apply to the use of your well:

1. If the well is not in use it must be properly capped.

2. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with §13-168-12(f), HAR prior to any well sealing or plugging work.

3. In the event that the well operator and/or landowner changes, the Commission shall be notified prior to the change.

4. In the event the benchmark in the concrete base of the well is altered in any way, an updated version of the Well Elevation page of the Well Completion Report Part I shall be submitted to the Commission. If a licensed surveyor had estimated the original benchmark elevation then a licensed surveyor must establish the new benchmark elevation. The Well Elevation portion of the Well Completion Report Part I can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrmlforms.htm.

5. Your approved pump has a capacity of 540 gallons per minute at a head of 280 feet. In the future, pump replacements of equal or lesser capacity will not require a permit from the Commission, but will require the submission of a Well Completion Report Part II by the licensed pump installer within 60 days after the work is completed. If the capacity of the replacement pump is more than the existing pump, you will need to apply for a new pump installation permit.
6. The landowner shall cause the well operator to maintain the installed meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides, temperature, and water levels in the well. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR. Blank water use report forms are also available at www.hawaii.gov/dlnr/cwrmlresources_permits.htm

7. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. The authorization to drill a well and/or install a pump shall not constitute a determination of correlative water rights. The landowner and well operator are notified that the quantity of water taken from the well and/or the pump capacity could be reduced by the Commission in the future.

Because ground water in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions, or any other provision of the Hawaii Administrative Rules, may be subject to fines of up to $5,000/day. The Commission needs your help and asks that you do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

If you have any questions, please contact Denise Mills of the Commission staff at 587-0251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

DM:ss
Encl: Monthly Ground Water Use Report Form

c: Kauai Department of Water
September 9, 2008

Ken C. Kawahara, P.E.
Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 821
Honolulu, Hawaii 96809

RE: Request for Information Well Nos. 0618-09 and 0618-10 (TMK (4) 4-7-003-002)

Dear Mr. Kawahara:

We represent Plantation Partners Kauai, LLC (“PPK”). This letter responds to your letter, dated August 21, 2008, requesting information as to ownership of the above-referenced wells.

You are correct that PPK owns the land where the above-referenced wells are located (the “Property”). Please update your records to reflect the PPK as the fee simple owner of the Property. PPK purchased the Property on or about March 24, 2006 from Kealia Plantation Company, LLC.

Additionally, pursuant to a Grant of Easements, dated December 22, 2004, recorded in the State of Hawaii Bureau of Conveyances as Document No. 2006-044972, Kealia Water Company Holdings, LLC (“KWC”), has easement rights where the wells are located, which include the right to draw a certain amount of water per day. KWC owns the potable water infrastructure located in the easement areas. The Grant of Easements requires KWC to comply with all laws as to its use and maintenance of the easement areas and operation of its infrastructure. Accordingly, we request that you update your records to reflect KWC as the well operator for the above-referenced wells.

Sincerely yours,

[Your Name]
Plantation Partners Kauai, LLC

[Address]

[City, State ZIP Code]
I understand that KWC has provided you with copies of the deed transferring title to PPK as well as the Grant of Easements. Please contact me at 808.547.5406 if you have any questions or need further information. Thank you for your courtesy.

Very truly yours,

CASE LOMBARDI & PETTIT

[Signature]

Lauren R. Sharkey

LRS: lcc
27946/3/887252.1
cc: Plantation Partners Kauai, LLC
Paul Alston, Esq.
Hi Stuart,

This is a follow-up to my conversation with you on August 25, regarding our research on the ownership and control of the Kealia Village public water system, PWS #423-000. The original permittee and developer of this system was Kealia Mauka Holdings, LLC. It appears they have reorganized, but the same entities are involved.

We have received confirmation that, although the land is owned by Plantation Partners Kauai, LLC, Kealia Water Company holds a perpetual easement over the land where the wells are located and easements for the appurtenant infrastructure for water delivery. The correspondence we receive states that Kealia Water Company is the operator and well owner. They provided copies of the Grant of Easements, recorded on March 9, 2006. This is a thick set of documents--do you need a copy for your records?

Based on this new information, we have updated the contact information for these wells, as follows:

Kealia Water Company Holdings, LLC
c/o Paul Alston, Esq.
Alston, Hunt, Floyd & Ing, Lawyers
1001 Bishop Street, 18th Floor
Honolulu, HI 96813
ph: (808) 524-1800
fax: (808) 524-5976

Responsible officials:
Paul Alston
Elizabeth Haws Donnally

On Kauai:
Monica Rodriguez
Kealia Water Company
P.O. Box 539
Anahola, HI 96703
ph: (808) 821-0440
cell ph: (808) 651-5626

They also go by Cornerstone Hawaii Holdings (a Colorado limited liability company).

Please let me know if you would like a copy of the property ownership and easement documents we received from the company, or if you're interested in receiving any other information from us regarding the wells and well use.

Thanks,
-- Denise

Denise E. Mills
HYDROLOGIST

Hawaii Department of Land and Natural Resources
Commission on Water Resource Management
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96813
Phone: (808) 587-0251
Denise.E.Mills@hawaii.gov
TRANSMITTAL MEMO

To: Monica Rodriguez
   P. O. Box 539
   Anahola, Hawai‘i 96703

RE: Kealia Water Co.

DATE: September 5, 2008

COPIES

1 ea.

DESCRIPTION

Documents requested from DLNR Commission on Water Resource Management regarding Kealia Mauka Wells and Kealia Makai Wells:

Letter dated 8/21/08 from DLNR to H. Andrew Friend re Request for Information regarding Kealia Wells 1A and 2A

2008 Assessed Values

Letter dated 2/28/01 from Lorna Nishimitsu to Linnell Nishioka re Pump Installation Permit for Kealia Wells 1A and 2A, with enclosure

Letter dated 1/31/02 from Thomas Arizumi to Hon. Gilbert S. Coloma-Agaran re proposed source of potable water, Kealia Wells 1A and 2A, with enclosure

Letter dated 3/11/02 from Linnel T. Nishioka to Kealia Mauka Holdings, LLC re Well Completion Report for Kealia Wells 1A and 2A, with enclosures

1 9/5/08 Letter to Ken Kawahara, with attachments [stamped “Received” by DLNR]

[ X ] For your information/files
[ ] Per your request/our conversation
[ ] For review and signature
[ ] Returned to you

[ ] For signature/notarized
[ ] For filing/recordation
[ ] Return to our office
[ ] Forward to:

REMARKS:

ALSTON HUNT FLOYD & ING

Enclosure(s)

687634 / 9163-1
Assessed Values reflect tax year 2008.

Search criteria: TMK Taxkey 4-4-7-3-2

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PUBLIC RECORD DATA

★ TMK # 4-4-7-3-2 2371 KEALIA RD

Owner: PLANTATION PARTNERS KAUAII LLC
Tax Payer: PLANTATION PARTNERS KAUAII LLC
Tax Bill: PO BOX 1318, KILAEA, HI 96754 USA

Assessed Value  Exemption  Size  Buildings: 0  Dwellings: 0

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SALES

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KEALIA PLANTATION COMPANY LLC, A Company or Corporation

THE LIHUE PLANTATION COMPANY LTD, A Company or Corporation

2/18/2000  QD-M  $100 DOC 00-022343
KEALIA MAUKA HOLDINGS LLC, A Company or Corporation

2/18/2000  DEED-M  $3,897,692 DOC 00-022344
KEALIA MAUKA HOLDINGS LLC, A Company or Corporation(Tenants in Severalty)

6/26/2001  QD-M  $1,000 DOC 01-097095
POR CONVEYED ONLY- NO AREA GIVEN
KEALIA PLANTATION COMPANY LLC, A Company or Corporation

6/26/2001  DEED-M  $1,000 DOC 01-097096
KEALIA PLANTATION COMPANY LLC, A Company or Corporation

3/24/2006  DEED-M  $47,372,000 DOC 06-056603 BOC
PLANTATION PARTNERS KAUAII LLC, A Company or Corporation(Tenants in Common)
*2.193% UNDIVIDED INTEREST
KEALIAKEALANANI LLC, A Company or Corporation(Tenants in Common)
*93.421% UNDIVIDED INTEREST
DCA HAWAII LLC, A Company or Corporation(Tenants in Common)
*4.386% UNDIVIDED INTEREST

DEVELOPER'S PUBLIC REPORT/ASSOCIATION BIENNIAL REGISTRATION

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September 21, 2008

Mr. H. Andrew Friend
Plantation Partners Kauai, LLC
P.O. Box 1318
Kilauea, HI 96754

Dear Mr. Friend:

Request for Information

Well Nos. 0618-09 and 0618-10 (TMK (4) 4-7-003:002)

We recently learned that Well Nos. 0618-09 (Kealia Well 1A) and 0618-10 (Kealia Well 2A), at Kealia within TMK (4) 4-7-003:002, are operated by a company named Kealia Water Company Holdings, LLC. Our research, however, shows that these wells are not owned by Kealia Water Company Holdings, but are on land owned by Plantation Partners Kauai, LLC. These wells were completed (well construction and pump installation) in 2002 by Oasis Water Systems for Kealia Mauka Holdings, LLC, under permits issued by the Commission on Water Resource Management (Commission).

We need to update our records for these wells to show correct landowner and well operator information. We also intend to transfer ownership to the current landowner for future correspondence relating to the regulation of water use and well maintenance. We are prepared to transfer the wells to Plantation Partners Kauai, LLC, but need to confirm that you own this land before proceeding. Please advise us if the wells should be transferred to another person. You should be aware that such transfer would place responsibility on Plantation Partners Kauai, LLC for all aspects of well use and maintenance, in accordance with the State Water Code (Chapter 174C, HRS), §13-168, HAR, and the Hawaii Well Construction & Pump Installation Standards (HWCPIS). Please provide the correct ownership information within 30 days from the date of this letter.

Under the State Water Code (Chapter 174C, HRS), the landowner is responsible for the proper care and disposition of any wells on their land. Under Chapter 174C, HRS, the landowner is responsible for complying with the following requirements for the maintenance and use of its wells:

1. If the well is not in use it must be properly capped.

2. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work. Section 3.1 of the HWCPIS gives the following criteria for wells requiring proper abandonment and permanent sealing:
a. Their purpose has been served, or
b. Their use has been permanently discontinued, and
c. Their physical condition is causing or threatening contamination, deterioration in quality, or waste of ground-water resources, or
d. Their state of disrepair makes their continued use impractical or creates a hazard to public health or safety.

3. The landowner shall cause the well operator to maintain the installed meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. For the subject wells, total monthly water withdrawals, water levels, chlorides, and temperature must be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR. The Commission has not received any water use reports for these wells.

Because ground water in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions, or any other provision of the State Water Code and Hawaii Administrative Rules, may be subject to fines of up to $5,000 per day. The Commission needs your help and asks that you to do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

Please call Denise Mills at (808) 587-0251 or toll-free from Kauai at 274-3141, extension 70251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

DM:ss

c: Kealia Water Company Holdings, LLC
WELL COMPLETION REPORT - PART II

State of Hawaii
Commission on Water Resource Management
Department of Land and Natural Resources

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 871, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 30 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-587-0219. For updates to this form or additional information, please visit our website at http://www.state.hawaii.gov/udor/wwr.

1. State Well No.: 8018-10
   Well Name: Ko'a'a State Park Wt 2A
   Island: Kauai
2. Address: Kilauea Tax Map Key: 4-7-03-2
4. Date Pump Installed: 8/14/01
5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Grundfos 6255500-2-1
   Rated Capacity: 390 gpm at head of: 20 ft.
   Motor Type, H.P., Voltage, rpm: Franklin 50 hp, 480 volt, 1750 rpm
   Type of flow meter: digital which measures in gallons
   Pump type (check one):
   [ ] Deep Well Turbine [ ] Rotary [ ] Propeller
   [ ] Submersible [ ] Rotary-Displacement [ ] Reciprocating
   [ ] Centrifugal [ ] Rotary-Gear [ ] Impulse
6. Method of flow measurement:
   [ ] Flowmeter Manufacturer ABB Make digital Size 8"
   [ ] Well [ ] Open Pipe [ ] Orifice [ ] Other*, explain below
   +attach schematic
7. Fill in the as-built section on the other side of this sheet.
8. Other remarks/comments:

Pump Installation Contractor (name): Oasis Water C-571C-571A Lic No: 31457
Signature ___________________________ Date 9-4-01
Permittee (print) ___________________________
Signature ___________________________ Date ___________
TO: John Roth
FROM: Charley Ike

Well Completion Reports for Kealia Wells 1A & 2A
(Well Nos. 06158A & 10)

Roth 547 5536
946 545 1605 547
John Roth
5536
1042 545
F: 523 1888
jrath@caselombardi.com
let's wait for the 0618-05 & 06 pump test data first. In the meantime, we should ask Monica to gather up the monthly water use reports with water levels and chlorides that are owed to the CWRM.

Charley F Ice/DLNR/StateHiUS

Monica Rodrigues of Kealia Water Company Holdings, LLC (operates 0618-09 & -10) called to inquire about work being done in the immediate vicinity. It turns out to be the refurbishment of Kealia Plantation Wells 6 & 7 (0618-06 & 05), right across the haul cane road. There is a question of whether the latter wells would interfere with the former, which are PUC licensed and serving existing residential units. I requested relevant details be put in writing. Interesting that Tom Nance, who has been involved with both, did not mention the former when applying for the latter, and that he proposed 160 gpm pumps and 75,000 gpd for 300 domestic units!

I noted that the burden will be on the later developer to show no interference with an existing legal use, and that we should consider appropriate PT protocols for that purpose (wcps and pips have been issued already). When we get the written advisory, that would be an appropriate trigger to revisit conditions for the PT -- right?
FAX: Transmitting 23 pages, including this one; call 587-0251 with any reception problems.

TO: Monica Rodrigues  Date: 06 Feb 08
FROM: Charley Iea

This is part of the early record, which does raise the issue of properly sealing unlocated wells when found, based on the experience of wells 1 & 2

Monica Rodrigues 821 0448
F: 055°
C: 651-5626
See also 0618-0340 07
Hello Roy,

I'm glad the information was helpful to you. Here's our response to your questions:

1. After clarifying the application with their consultant, Dan Lum of Water Resource Associates, our understanding is that the total proposed withdrawal from both wells is 860,000 gpd.

2. The pumping is limited by the installed pump capacity. The island of Kauai has not been designated as a ground-water management area (174C-41 to 59 HRS), therefore, actual water use is not regulated. However, water use must be reasonable and beneficial, and water may not be wasted.

3. No, the 50 gpm discrepancy is not a problem with our agency. We have determined that the pump test data supports a 650 gpm capacity pump, and on that basis, we accepted the Well Completion Report Part II (our letter of March 11, 2002).

Hope this helps your understanding. Please call or email if you have any further questions.

Aloha,
Lenore
“Roy Catalani” <RCatalani@rmhawaii.com>

Hello Lenore:

Thanks for all the documentation on Kealia Wells 1-A and 2-A.

After reading this documentation, I have three related questions regarding limits on pumping which I hope you can answer:

1. With respect to the two Applications for Permits (for Well Construction and Pump Installation) by Kealia Mauka Partners, LLC for Kealia Wells 1-A and 2-A (received by the CWRM on Sep. 19, 2000), the applications for both Kealia 1-A and Kealia 2-A state a "proposed amount of withdrawal of 860,000 gallons per day." For Kealia Well 1-A, the proposed use is for 100 dwelling units. For Kealia Well 2-A, the proposed use is "back up" for dwelling units (apparently "back up" for servicing the dwelling units primarily serviced by Kealia Well 1-A). Question: Is the proposed amount of withdrawal (a) a collective or total amount of 860,000 gpd for both wells or (b) 860,000 for each well with the total being 1,720,000 gpd for both wells?

2. Is the applicant limited by the CWRM to pumping no more than either 860,000 or 1,720,000 gpd? Is this limitation by virtue of Condition 9
of the Well Construction Permit (which reads: "The well construction permit is incorporated into this permit by reference ***") and/or Condition 7 of the Pump Installation Permit (which reads: "The pump installation permit application is incorporated into this permit by reference ***") or does such a limitation on pumping come by virtue of another rule or permit or other source?

3. Condition 2 of the Pump Installation Permit for Kealia Wells 1A and 2A (dated February 23, 2001) states: "The pump installation permit shall be for installation of a 600 gpm capacity, or less, pump in the well." On March 5, 2002, Oasis Water Systems, Inc. submitted a revised page 1 of the Well Completion Reports (Part 2) (Pump Installation) for both Kealia Wells 1-A and 2-A (which were acknowledged as complete by the CWRM on March 11, 2002). In the Well Completion Report (Part 2) for Kealia Well 1-A, the "rated capacity" was corrected to read "650" gpm. Is this 50 gpm discrepancy between the pump installation permit and the Well Completion Report (Part 2) an issue or a problem?

Again, thanks for all of your help in understanding the status of these wells.

Aloha,

Roy

Rush Moore Craven Sutton Morry & Beh, A Limited Liability Law Partnership, LLP
Honolulu, Hawaii, Tel. (808) 521-0400, Fax (808) 521-0497
Wailuku, Maui, Hawaii, Tel. (808) 244-3332, Fax (808) 244-5322
Kailua-Kona, Hawaii, Tel. (808) 329-4466, Fax (808) 329-4468

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>>> <Lenore.Y.Nakama@hawaii.gov> 03/02/04 01:14PM >>>
Hi Roy,

I was out the better part of last week, so sorry I took awhile to get back to you.

I have already provided you with the map and database information. The wells were not registered because the registration program was a "snapshot in time" of existing sources as of 1987. These wells were constructed in about 2001.
The well file contains 74 pages total. In addition, there is a Preliminary Engineering Report prepared for the Department of Health that is another 60 pages. We charge 50 cents per xerox page. So, the cost would be $37, or $67 if you want the DOH report too. Please send a check payable to DLNR for either $37 or $67 and we will make the copies and call you when they are ready to be picked up. If you like, you are also welcome to come to our office to view the file and pick & choose which documents you would like copied.

Aloha,
Lenore

"Roy Catalani"<RCatalani@rmhawaii.com>
02/26/2004 03:06 PM

To
<Lenore.Y.Nakama@hawaii.gov>
cc

Subject
Re: kealia well info request

Hello Lenore:

Thank you for all of the information you've provided.

With respect to our "Well Information Request", may I amend our "Specific Information Desired" as follows:

Specific Information Desired: Maps, data base information and file documents relating to well registration, construction and installation of production wells and water use for the following two wells in that area known as the Ahupuaa of Kealia on the island of Kauai:

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<td>0618-09</td>
<td>Kealia 1A</td>
<td>Kealia Mauka Holdings</td>
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<td>Kealia 2A</td>
<td>Kealia Mauka Holdings</td>
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Please let me know if I need to file an amended Well Information Request.

Thank you.

Roy
Hi Roy,

Here is a spreadsheet with information on wells in the Kealia area. I am also sending an explanation for the different fields. I put the maps in the regular mail today. You can relate the maps to the spreadsheet by the six digit well number. (1st 2 digits are the minutes of latitude, 2nd 2 digits are the minutes of longitude, the last 2 digits after the hyphen is the sequential number of the well within the grid. I wrote in the minutes of latitude & longitude across the bottom & right-hand margins of the map.)

Please call me if you have any questions or we can be of further assistance.

(See attached file: anahola aquifer wells.xls) (See attached file: Ground Water Index.doc)

Aloha,

Lenore
March 11, 2002

Kealia Mauka Holdings, LLC
c/o Ms. Loma Nishimitsu
Law Offices of Walton Hong
3135A Akahi St.
Lihue, HI 96766

Dear Ms. Nishimitsu:

Well Completion Report for Well No. 0618-09 & 10

We received your Well Completion Reports Part II for the Kealia Makai Wells 1A & 2A (Well No. 0618-09 & 10) on March 8, 2002 and acknowledge that they are complete.

If you have any questions, please contact Lenore Nakama of the Commission staff at 587-0218 or toll-free at 274-3141, extension 70218.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LN:ss

c: Steve Goldberg, Oasis Water Systems
Hi Lenore:

Sorry it took so long the engineer at ITC did not get back to me till yesterday. Enclosed is the pump completion report page 1 for 0818-10 Kealia Makai wells 1A & 2A.

Thanks, Steve
**State of Hawaii**  
**Commission on Water Resource Management**  
**Department of Land and Natural Resources**  
**Well Completion Report - Part II**  
**Pump Installation**

**Instructions:** Please print in black type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 821, Hilo, Hawaii 96720. The Commission may not accept incomplete reports. This form shall be submitted within 30 days of the completion of work. For more information, please contact Hilo Well Construction and Pump Installation Standards or call the Regulation Branch at 808-656-5328. For updates on this form or additional information, please visit our website at [http://www.state.hi.us/dlnr/](http://www.state.hi.us/dlnr/)

<table>
<thead>
<tr>
<th>1. State Well No.: 8614-10</th>
<th>Well Name: Kealia Makaupi Well 2A</th>
<th>Island: Keaau</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address:</td>
<td>Keaau</td>
<td></td>
</tr>
<tr>
<td>4. Data Pump installed:</td>
<td>8/14/01</td>
<td></td>
</tr>
<tr>
<td>5. PERMANENT PUMP INFORMATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump Type, Make, Serial No.: Grundfos 6255500-3-2</td>
<td>17DH00830 009113P10</td>
<td>109US9521</td>
</tr>
<tr>
<td>Rated Capacity: 100 gpm at head of: 299 ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Type, H.P., Voltage, rpm: Franklin 60 hp 460 volt 3450 rpm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of flow meter: digital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump type (check one):</td>
<td>0</td>
<td>Deep Well Turbine</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Submersible</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Centrifugal</td>
</tr>
<tr>
<td>Method of flow measurement:</td>
<td>0</td>
<td>Flowmeter</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Manufacturer ABB Made digital</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Size 8&quot;</td>
</tr>
</tbody>
</table>

6. Method of flow measurement:  
- Flowmeter: Manufacturer ABB, Make digital, Size 8"  
- Other, explain below: attach schematic

7. Fill in the as-built section on the other side of this sheet.

8. Other remarks/comments:

Pump Installation Contractor: Oasis Water, C-67/C-67a/A Lic. No. 21457

Signature: [Signature]
Date: 9-4-01

Permittee (print):
[Signature]
Date: 3-1-02

---

completed by 3/8/02 telecomm w/Steve Goldberg
Hi Lenore:

Enclosed is the pump permit for 0618-10 Kealia Makai wells 1A & 2A -> 0618-10

\[ \text{PIP FOR 600 gpm, THEY INSTRUCTED 650 gpm} \]

Thanks, Steve

2/29/02 Called Steve, he said that he will check & call me back. According to engineers, Steve called back. The pumping head is actually at 280', which reduces the rated capacity to 540 gpm. He will file an amended w/c 2.
February 28, 2001

Linnell Nishioka, Esq.
Deputy Director
Commission on Water Resource Management
State of Hawaii
Department of Land and Natural Resources
P. O. Box 621
Honolulu, HI 96809

RE: Kealia Mauka Holdings, LLC
Kealia 1A and 2A, Well Nos. 0618-09 & 10

Dear Linnell:

Enclosed herewith is an original Pump Installation Permit, which has been executed by Justin Hughes, Manager of Kealia Mauka Holdings, LLC.

I have been advised by Steve Goldberg of Oasis Water Systems, Inc., who is the installer of the pumps, that he has executed a counterpart original and already returned it to you.

Thank you.

Very truly yours,

LORNA A. NISHIMITSU

Enclosure

cc: Client

/l-1ni.kpc/
In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Kealia 1A & 2A (Well Nos. 0618-09 & 10) at Kealia, Kauai, TMK 4-7-03:2, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 600 gpm capacity, or less, pump in the well.

3. The permittee, well owner, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chloride and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well owner, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well owner, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: February 20, 2001
Expiration Date: February 20, 2003

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee’s Signature: Justin Hughes

Printed Name: Justin Hughes Firm or Title: Manager, Kealia Mauka Holdings, LLC

C-57, C-57a, or A License #: Date: 2/27/01

Installer’s Signature: ________________
Printed Name: ________________ Firm or Title: ________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
# WELL COMPLETION REPORT - PART II

**Pump Installation**

**State of Hawaii**
**COMMISSION ON WATER RESOURCE MANAGEMENT**
**Department of Land and Natural Resources**

**Instructions:** Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96808. The Commission may not accept incomplete reports: This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-587-0228. For updates to this form or additional information, please visit our website at [http://www.state.hi.us/dln/cwrm/](http://www.state.hi.us/dln/cwrm/)

## 1. State Well No.: 0618-10
Well Name: Kealia Makai Well 2A
Island: Kauai

## 2. Address:
Kealia
Tax Map Key: 4-7-03:2


## 4. Date Pump Installed: 8/14/01

## 5. PERMANENT PUMP INFORMATION

<table>
<thead>
<tr>
<th>Pump Type, Make, Serial No.: Grundfos 625S500-3-2 102US521</th>
<th>Rated Capacity: 540 gpm at head of: 280 ft</th>
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<tbody>
<tr>
<td>Motor Type, H.P., Voltage, rpm: Franklin 50 hp 460 volt 3450 rpm</td>
<td></td>
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</tbody>
</table>

Type of flow meter: digital which measures in gallons

Pump type (check one):
- Deep Well Turbine
- Submersible
- Centrifugal
- Propeller
- Rotary
- Rotary-Displacement
- Reciprocating
- Rotary-Gear
- Impulse

Method of flow measurement:
- Flowmeter Manufacturer ABB Make digital Size 8"
- Weir Open Pipe Orifice Other*, explain below

*attach schematic

7. Fill in the as-built section on the other side of this sheet.

8. Other remarks/comments:

---

**Pump Installation Contractor (print):** Oasis Water

**Signature:**

**Lic. No.:** 21457

Date 9-4-01

---

**Permittee (print):**

**Signature:**

Date
9. AS-BUILT PUMP SECTION

Bench mark elevation surveyed to nearest 0.01 ft. = 10.10 ft. mean sea level.

Elevation of top of chase tube = 11.18 ft. mean sea level.

Pump intake depth = 48 ft. (referenced to bench mark)

Chase tube depth = 42 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = -10 ft. mean sea level.
State of Hawaii  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
WELL COMPLETION REPORT - PART II  
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 821, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-687-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/div/cwrmm/

1. State Well No.: 0618-262Q Well Name: Kealia Makai Well 1A island: Kauai
2. Address: Kealia Tax Map Key: 4-7-03:2
4. Date Pump Installed: 8/14/01
5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Grundfos 6255500-3-2
   Motor Type, H.P., Voltage, rpm: Franklin 50 hp 460 volt 3450 rpm
   Type of flow meter: digital which measures in gallons
   Pump type (check one):
   □ Deep Well Turbine  □ Rotary
   □ Submersible      □ Rotary-Displacement  □ Propeller
   □ Centrifugal      □ Rotary-Gear          □ Reciprocating
   □ Centrifugal      □ Reciprocating-Gear
   □ Propeller
6. Method of flow measurement:
   □ Flowmeter Manufacturer ABB □ Digital □ Size 8"
   □ Weir □ Open Pipe □ Orifice* □ Other*, explain below
   *attach schematic
7. Fill in the as-built section on the other side of this sheet.
8. Other remarks/comments:

   Pump Installation Contractor (print) Oasis Water C-57/C-57a/A Lic. No. 21457
   Signature Date 9-4-01
   Permittee (print)
   Signature Date

WCR2 Form 5200  
PAGE 02  
OASIS WATER SYSTEMS  
08/26/2002 15:14  8068200778
Bench mark elevation surveyed to nearest 0.01 ft. = 10.08 ft. mean sea level

Elevation of top of chase tube 11.10 ft. mean sea level

Pump intake depth = 48 ft. (referenced to bench mark)

Chase tube depth = 42 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = -10 ft. mean sea level
In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-166, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Kealii 1A & 2A (Well Nos. 0616-09 & 10) at Kealii, Kauai, TMK 6-7-03-2, subject to the Hawaii Well Construction & Pump Installation Standards (13/2397) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96808, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and shall be allowed to inspect installation activities in accordance with §13-166-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 600 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of cumulative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the water capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (13/2397). If the HWCSV's are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of receipt of the permit, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or capping work.

10. The permittee, his successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, or employees, contractors, or agents under this permit or relating to or connected with the granting of this permit.

11. Special conditions in the attached cover transmitter letter are incorporated herein by reference.

Date of Approval: February 20, 2001
Expiration Date: February 20, 2003

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: ___________________________ Date: ______________

Printed Name: ___________________________ Firms or Title: ___________________________

Installer's Signature: ___________________________ Date: 2-27-01

Printed Name: ___________________________

Firms or Title: ___________________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments:
- UDB
  - Department of Health, State Drinking Water & Waste Water Branch
  - Kauai Department of Water Supply
  - Dan Luna, Water Resource Associates, 1189 Bishop St., Ste. 1702, Honolulu, HI 96813-3307
February 23, 2001

Pump Installation Permit
Kealia 1A & 2A (Well Nos. 0618-09 & 10)

Enclosed are two (2) originals of your approved Pump Installation Permit for the captioned well(s) that authorize permanent pump installation work for your well(s). As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 11:

Special Conditions

1. If the elevation benchmark needs to be altered, the permittee, well operator, and/or well owner shall ensure that the benchmark is transferred (or the well resurveyed) and documentation of the new benchmark shall be submitted to the Commission within sixty (60) days after the pump is installed.

2. The permittee shall submit applications to abandon/seal Kealia 1 to 7 Wells (Well Nos. 0618-01 to 07). If the permittee wishes to retain Well Nos. 0618-01 to 07, the permittee shall submit information regarding the current status of the wells, any future plans to use the wells, and any reasons why these wells should not be abandoned and sealed. Either applications or status information shall be submitted within sixty (60) days after the pumps for Well Nos. 0618-09 & 10 are installed.

The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the pump installation contractor submits a completed Part II of the Well Completion Report form (enclosed) within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign and have the contractor sign both permit originals and return one for our files. A copy of the Well Completion Report (Part II) and a copy of your water use report form are enclosed for your use.

IMPORTANT - Pump installation shall not commence until a fully signed permit is returned to the Commission. Except for the monthly water use report form, please provide copies of all the information in this packet to your pump installation contractor.

Finally, this letter is notice that we have accepted your Well Completion Report - Part I as complete as of February 20, 2001.

If you have any questions, please call Lenore Nakama of the Commission staff at 587-0218 or toll-free at 274-3141, extension 70218.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosure
c. Dan Lum, Water Resource Associates
In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Kealia 1A & 2A (Well Nos. 0618-09 & 10) at Kealia, Kauai, TMK 4-7-03:2, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 600 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: February 20, 2001
Expiration Date: February 20, 2003

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: ________________________ Date: __________

Printed Name: ________________________ Firm or Title: ________________________

Installer's Signature: ________________________ C-57, C-57a, or A License #: ________________________ Date: __________

Printed Name: ________________________ Firm or Title: ________________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments
C: USGS
Department of Health/ Safe Drinking Water & Wastewater Branch
Kauai Department of Water Supply
Dan Lum, Water Resource Associates, 1188 Bishop St., Ste. 1706, Honolulu, HI 96813-3307
Well Name: Kealia Makai Well 1A (0618-09)
Date of Test: January 26, 2001
Date of Analysis: 21-Feb-01

Alternative way for determining T from step-drawdown data (Mink, per. comm)

\[ Q = \text{ft}^3/\text{d} \]

\[ \begin{align*}
Q1 (\text{gpm}) &= 700 = 134750 \text{ ft}^3/\text{d} \\
Q2 (\text{gpm}) &= 306 = 58905 \text{ ft}^3/\text{d}
\end{align*} \]

Set up two equations:

\[ s1 = jQ1 + nQ1^2 \]
\[ s2 = jQ2 + nQ2^2 \]

\[ \begin{align*}
Q2 &= 58905 \quad s2 = 0.58 \\
Q1 &= 134750 \quad s1 = 1.65
\end{align*} \]

Well Depth below sea level = 184 ft

Radius of well (ft) = 0.5 ft

\[ n = s1 - (Q1/Q2)s2/Q1(Q1-Q2) = 3.2E-11 \]
\[ j = s/Q - nQ = 8E-06 \]

Laminar flow equation:

\[ s = jQ = 1.075782 \quad 65.20\% \text{ Head loss due to laminar flow} \]

Thiem Eq.

\[ T = \frac{1}{2\pi j}(\ln(re/r)) \]

\[ re = \text{Well Depth BSL} \times 1.6 = 294.4 \]

Therefore:

\[ T = \frac{1}{2\pi j}(\ln(re/r)) = 127150 \text{ ft}^2/\text{d} \]
Pumping Test No. Long Term Test | Test conducted on: January 29-31, 2001
0618-09
Discharge 115885.00 ft³/d

Transmissivity [ft²/d]: $1.37 \times 10^5$
**Pumping Test No. Long Term Test**

<table>
<thead>
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<th>Pumping Test duration</th>
<th>Water level</th>
<th>Drawdown</th>
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<tbody>
<tr>
<td>[d]</td>
<td>[ft]</td>
<td>[ft]</td>
</tr>
<tr>
<td>1 1.500000</td>
<td>3.50</td>
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</tr>
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<td>2 2.000000</td>
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<td>15 240.000000</td>
<td>3.74</td>
<td>1.39</td>
</tr>
<tr>
<td>16 360.000000</td>
<td>3.81</td>
<td>1.46</td>
</tr>
<tr>
<td>17 420.000000</td>
<td>3.83</td>
<td>1.48</td>
</tr>
<tr>
<td>18 540.000000</td>
<td>3.90</td>
<td>1.55</td>
</tr>
<tr>
<td>19 600.000000</td>
<td>3.96</td>
<td>1.61</td>
</tr>
<tr>
<td>20 660.000000</td>
<td>4.02</td>
<td>1.67</td>
</tr>
<tr>
<td>21 720.000000</td>
<td>4.04</td>
<td>1.69</td>
</tr>
<tr>
<td>22 840.000000</td>
<td>3.98</td>
<td>1.63</td>
</tr>
<tr>
<td>23 1020.000000</td>
<td>3.83</td>
<td>1.48</td>
</tr>
<tr>
<td>24 1440.000000</td>
<td>3.83</td>
<td>1.48</td>
</tr>
<tr>
<td>25 1500.000000</td>
<td>3.90</td>
<td>1.55</td>
</tr>
<tr>
<td>26 1680.000000</td>
<td>3.96</td>
<td>1.61</td>
</tr>
<tr>
<td>27 1875.000000</td>
<td>4.00</td>
<td>1.65</td>
</tr>
<tr>
<td>28 1980.000000</td>
<td>4.00</td>
<td>1.65</td>
</tr>
<tr>
<td>29 2880.000000</td>
<td>3.90</td>
<td>1.55</td>
</tr>
</tbody>
</table>
Well Name: Kealia Makai Well 2A (0613-10)  
Date of Test: February 2, 2001  
Date of Analysis: 21-Feb-01

Alternative way for determining T from step-drawdown data (Mink, per. comm)

\[ Q = ft^3/d \]
\[ Q_1 \text{ (gpm)} = 691 = 133018 \text{ ft}^3/d \]
\[ s = ft \]
\[ Q_2 \text{ (gpm)} = 309 = 59483 \text{ ft}^3/d \]

Set up two equations:

\[ s_1 = jQ_1 + nQ_1^2 \]
\[ s_2 = jQ_2 + nQ_2^2 \]

\[ Q_2 = 59483 \quad s_2 = 0.5 \]
\[ Q_1 = 133018 \quad s_1 = 1.66 \]

Well Depth below sea level = 184

Radius of well (ft) = 0.5

\[ n = s_1 - \frac{(Q_1/Q_2)s_2}{Q_1(Q_1-Q_2)} = 5.5E-11 \]
\[ j = \frac{s}{Q} - nQ = 5.1E-06 \]

Laminar flow equation:

\[ s = jQ = 0.679798 \quad 40.95\% \text{ Head loss due to laminar flow} \]

Thiem Eq.

\[ T = \frac{1}{2\pi j} \ln(re/r) \]

\[ re = \text{Well Depth BSL \times 1.6} = 294.4 \]

Therefore:

\[ T = \frac{1}{2\pi j} \ln(re/r) = 198627 \text{ ft}^2/d \]
Pumping Test No. Long Term Test
0618-10
Discharge 114537.50 ft³/d

Transmissivity [ft²/d]: 1.85 x 10⁵
Pumping test analysis
Time-Drawdown-method after COOPER & JACOB
Confined aquifer

Date: 21.02.2001 Page 2
Project: Kealia Makai Well 2A
Evaluated by: Glenn Bauer

Pumping Test No. Long Term Test
0618-10
Kealia Makai

Discharge 114537.50 ft³/d
Distance from the pumping well 1.00 ft

Static water level: 2.75 ft below datum

<table>
<thead>
<tr>
<th>Pumping test duration</th>
<th>Water level</th>
<th>Drawdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>(d)</td>
<td>(ft)</td>
<td>(ft)</td>
</tr>
<tr>
<td>1</td>
<td>0.00139</td>
<td>3.79</td>
</tr>
<tr>
<td>2</td>
<td>0.00417</td>
<td>3.81</td>
</tr>
<tr>
<td>3</td>
<td>0.00486</td>
<td>3.82</td>
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<tr>
<td>4</td>
<td>0.00556</td>
<td>3.82</td>
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<tr>
<td>5</td>
<td>0.00694</td>
<td>3.82</td>
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<tr>
<td>6</td>
<td>0.01042</td>
<td>3.83</td>
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<tr>
<td>7</td>
<td>0.01389</td>
<td>3.83</td>
</tr>
<tr>
<td>8</td>
<td>0.01736</td>
<td>3.83</td>
</tr>
<tr>
<td>9</td>
<td>0.02083</td>
<td>3.84</td>
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<tr>
<td>10</td>
<td>0.02778</td>
<td>3.85</td>
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<tr>
<td>11</td>
<td>0.03472</td>
<td>3.88</td>
</tr>
<tr>
<td>12</td>
<td>0.04167</td>
<td>3.92</td>
</tr>
<tr>
<td>13</td>
<td>0.08333</td>
<td>3.92</td>
</tr>
<tr>
<td>14</td>
<td>0.12500</td>
<td>3.94</td>
</tr>
<tr>
<td>15</td>
<td>0.16667</td>
<td>3.92</td>
</tr>
<tr>
<td>16</td>
<td>0.20000</td>
<td>3.92</td>
</tr>
<tr>
<td>17</td>
<td>0.91667</td>
<td>3.98</td>
</tr>
<tr>
<td>18</td>
<td>0.95833</td>
<td>4.02</td>
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<tr>
<td>19</td>
<td>1.00000</td>
<td>4.10</td>
</tr>
<tr>
<td>20</td>
<td>1.04167</td>
<td>4.13</td>
</tr>
<tr>
<td>21</td>
<td>1.08333</td>
<td>4.19</td>
</tr>
<tr>
<td>22</td>
<td>1.25000</td>
<td>4.02</td>
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<tr>
<td>23</td>
<td>1.62500</td>
<td>3.92</td>
</tr>
<tr>
<td>24</td>
<td>1.95833</td>
<td>4.04</td>
</tr>
<tr>
<td>25</td>
<td>2.00000</td>
<td>4.13</td>
</tr>
</tbody>
</table>
Feb. 20 2001

State Of Hawaii
Water Commission
ATT: Lenore Nakama

Dear Lenore,

Enclosed is the completion report for Kealia 1A & 2A. Please review as the owner has other subcontractors waiting for Oasis Water to install the permanent pumps.

Sincerely,

Steve Goldberg
Oasis Water Inc. C-21457
Well 2A

2-0618-10 KEALIA 2A
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

WELL COMPLETION REPORT - PART I
Well Construction

Instructions: Please print or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-941-4600. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/wrm/.

<table>
<thead>
<tr>
<th>1. State Well No.: 0619-10</th>
<th>Well Name: Kealia Makai Well 2A</th>
<th>Island: Kauai</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address: Kealia</td>
<td>Tax Map Key: 4-7-03:2</td>
<td></td>
</tr>
<tr>
<td>4. Drilling method used during construction: (describe) Top Head Direct Rotary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Date Well Construction (drilled, cased, grouted) completed: 1/20/01 Attach Driller's Log (7/26/99 DL Form)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition to the driller's log, if a geologic log was prepared, please submit with this form.

| 6. Was the subject well cored? Yes No |
| 7. Initial water-level encountered 5' 6" ft. below ground Date and time of measurement: 12/6/00 |

| 8. Step-Drawdown Test completed? Yes No |
| 9. Constant Rate Aquifer Test completed? Yes No |

Parameters prior to pump test:

| 10. Water-level: 7' ft. above msl Date and time of measurement: 2/1/01 10am |
| 11. Chloride: 45 ppm Date and time of sampling: 2/1/01 10am |
| 12. Temperature: 72 °F Date and time of measurement: 2/1/01 10am |

13. Fill in the as-built section on the other side of this sheet.


15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)

16. Remarks:

Licensed Driller (print) Steve Goldenberg C-57 Lic. No. 21497
Signature Date 2-14-01

Surveyor (print) L.P.L.S. Lic. No.
Signature Date

Permittee (print)
Signature Date

WCR1 Form 9/26/00
# WELL COMPLETION REPORT - PART I

**State of Hawaii**

**COMMISSION ON WATER RESOURCE MANAGEMENT**

**Department of Land and Natural Resources**

**WELL COMPLETION REPORT - PART I**

**Well Construction**

Instructions: Please print in Ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 881, Honolulu, HI 96808. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please contact the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-586-8320. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/mwr/.

<table>
<thead>
<tr>
<th>1. State Well No.:</th>
<th>0019-16</th>
<th>Well Name:</th>
<th>Kealia Motor Well 2A</th>
<th>Island:</th>
<th>Kauai</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address:</td>
<td>Kealia</td>
<td>Tax Map Key:</td>
<td>4-7-03-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Drilling Company:</td>
<td>Oasis water Systems Inc</td>
<td>Rotary:</td>
<td></td>
<td>Percussion:</td>
<td></td>
</tr>
<tr>
<td>4. Drilling method used during construction:</td>
<td>(describe)</td>
<td>Top Head Direct Rotary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Date Well Construction (drilled,cased,grouted) completed:</td>
<td>1/20/01</td>
<td>Attach Driller's Log (7/26/99 DL Form)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. In addition to the driller's log, if a geologic log was prepared, please submit with this form.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Was the subject well cored?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Initial water-level encountered:</td>
<td>6 ft. below ground</td>
<td>Date and time of measurement:</td>
<td>1/20/01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Well completion (Top Head Direct Rotary) or Other:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Step-Drawdown Test completed?</td>
<td>Yes</td>
<td>No</td>
<td>Attach Step-Drawdown Test form (1/17/87 SEPTD Form)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Constant Rate Aquifer Test completed?</td>
<td>Yes</td>
<td>No</td>
<td>Attach Constant Rate Aquifer Test form (1/3/87 CAPTD Form)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Parameters prior to pump test:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Water-level:</td>
<td>7 ft. above msl</td>
<td>Date and time of measurement:</td>
<td>2/1/01</td>
<td>10am</td>
<td></td>
</tr>
<tr>
<td>14. Chloride:</td>
<td>45 ppm</td>
<td>Date and time of sampling:</td>
<td>2/1/01</td>
<td>10am</td>
<td></td>
</tr>
<tr>
<td>15. Temperature:</td>
<td>72°F</td>
<td>Date and time of measurement:</td>
<td>2/1/01</td>
<td>10am</td>
<td></td>
</tr>
<tr>
<td>16. Fill in the as-built section on the other side of this sheet.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Attach plot plan and surveyor's stamped elevation report.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Remarks:</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

---

**Licensed Driller (print):** 

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date:</th>
<th>C-57 Lic. No:</th>
<th>21487</th>
</tr>
</thead>
</table>

**Surveyor (print):**

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date:</th>
<th>L.P.L.S. Lic. No:</th>
<th>4383</th>
</tr>
</thead>
</table>

**Permittee (print):**

| Signature | Date: | |
|-----------|-------| |
# State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

## WELL COMPLETION REPORT - PART I
Well Construction

**Instructions:** Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 27, Honolulu, Hawaii 96816. The Commission may not accept in-person reports. This form shall be submitted within 90 days of the completion of work. For additional information, please contact the Hawaii State Water Well Construction and Pump Installation Standards or call the Registration Board at 808-586-8200. For updates to this form or additional information, please visit our website at http://www.aws.state.hi.us.

<table>
<thead>
<tr>
<th>1. State Well No.:</th>
<th>9019-16</th>
<th>Well Name:</th>
<th>Keah Maka Well 2A</th>
<th>Tax Map Key:</th>
<th>47-03-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address:</td>
<td>Keah</td>
<td>Island:</td>
<td>Kauai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Drilling method used during construction: (describe)</td>
<td>Top Head Direct Rotary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Date Well Construction (drilled, cased, grouted) completed:</td>
<td>1/29/01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Was the subject well cored? [ ] Yes [ ] No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Initial water-level encountered [ ] ft. below ground Date and time of measurement:</td>
<td>12/6/00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Step-Drawdown Test completed? [ ] Yes [ ] No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Constant Rate Aquifer Test completed? [ ] Yes [ ] No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Parameters prior to pump test:
| 10. Water-level: | ft. above msl Date and time of measurement: | 2/1/01 10 am |
| 11. Chloride: | ppm Date and time of sampling: | 2/1/01 10 am |
| 12. Temperature: | °F Date and time of measurement: | 2/1/01 10 am |

13. Fill in the as-built section on the other side of this sheet.
15. If a pump is not installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)

### Remarks:

**Licensed Driller (print):**

**Surveyor (print):**

**Permittee (print):**

---

**Signature:**

**Date:** 2/14/01

**L.P.L.S. Lic. No.:**

**Date:**

**Signature:**

**Date:** 2/15/01

---

**Licensed Driller (print):**

**Surveyor (print):**

**Permittee (print):**

**Signature:**

**Date:**
13. AS-BUILT WELL SECTION

(Please attach as-built if different from diagram provided below)

Elevation at top of casing: 11' 11", ft, mai. (to nearest 0.01 ft.)

Minimum of 2" Radius & 4" Thick Concrete Pad

Solid Casing: (2 x 90% x (Ground Elev. - Water Level Elev))
- Length: 95' __________ ft.
- Nominal Diameter: 12" __________ in.
- Wall Thickness: 5/16 __________ in.
- Bottom Elevation: 84' __________ ft, mai.

Open Casing: 
- Length: 100' __________ ft.
- Diameter: 11" __________ in.
- Bottom Elevation: 184' __________ ft, mai.

Open Hole:
- Length: __________ ft.
- Diameter: __________ in.
- Bottom Elevation: __________ ft, mai.

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): 
  - ANSI/AWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139
- Stainless Steel: compliant with (check one or more): 
  - ASTM A242
  - Type E
  - Type S
  - Grade B
  - Other A606 Type 4
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) 
  - Schedule 40
  - Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) 
  - Schedule 40
  - Schedule 80
  - Schedule 120
- Thermoset Plastic: (check one) 
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3298

Open Casing Material:
- Carbon Steel: compliant with (check one or more): 
  - ANSI/AWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139
  - Grade B
- Stainless Steel: compliant with (check one or more): 
  - ASTM A242
  - Type E
  - Type S
  - Grade B
  - Other
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) 
  - Schedule 40
  - Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) 
  - Schedule 40
  - Schedule 80
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  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
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  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3298

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to ensure that your as-built is in compliance with applicable standards.
NOTE:

Bench Mark
USGS Brass Disk at old
Kealia school building
Elev. = 10.42 ms

WELL ELEVATION

Top 12" Dia. pipe
Elev. = 11.18

Conc. Slab
Elev. = 10.10

Ground

Well No. 2-0618-10
KEALIA MAKAI WELL 2-A
Tax Map Key: 4-7-03
Kealia, Kauai, Hawaii
Date of Survey: February 16, 2001

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

Signature
ESAKI SURVEYING & MAPPING, INC.
Drillers Log Kealia Well #2a

All references in feet are from ground surface

1/6/01 through 1/20/01

<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- 4'</td>
<td>topsoil</td>
</tr>
<tr>
<td>4- 8'</td>
<td>brown clay</td>
</tr>
<tr>
<td>8- 18'</td>
<td>sand and marine deposits</td>
</tr>
<tr>
<td>18- 26'</td>
<td>very hard blue rock</td>
</tr>
<tr>
<td>26- 53'</td>
<td>red/brown clay</td>
</tr>
<tr>
<td>53- 89'</td>
<td>red/brown clay with sand and cinders</td>
</tr>
<tr>
<td>89- 105'</td>
<td>blue rock</td>
</tr>
<tr>
<td>105- 132'</td>
<td>broken rock, and coral</td>
</tr>
<tr>
<td>132- 155'</td>
<td>Puka rock, (water zone)</td>
</tr>
<tr>
<td>155- 163'</td>
<td>blue rock</td>
</tr>
<tr>
<td>163- 191'</td>
<td>Puka rock (water zone)</td>
</tr>
<tr>
<td>191- 195'</td>
<td>blue rock</td>
</tr>
</tbody>
</table>
**CONSTANT RATE TEST RECORD**

**Well Name:** KEALIA MAAKI 2A  
**State Well No.:** 0618-10  
**Project:**  

**DEPTH (Below Ground Surface):**
- Solid Casing: **95 ft**  
- Perforated Casing: **-**  
- Total Depth: **195 ft**  
- Depth to Water: **33"**  

**ELEVATIONS (Mean Sea Level):**
- Ground Surface: **-** ft  
- Top of Casing: **-** ft  
- Rotary Table: **-** ft  
- Bot. of Solid Casing: **-** ft  
- Bot. of Perf. Casing: **-** ft  
- Bot. of Well: **-** ft  
- Static Water Level: **-** ft

**TEST PUMP:**
- Type: **-**  
- Intake Elev.: **-** ft

**DRAWDOWN MEASUREMENT:**
- Type: **-**  
- Intake Elev.: **-** ft

**DISCHARGE MEASUREMENT:**
- Type: **-**  
- Intake Elev.: **-** ft

**PRESENT AT TEST:** STEVE GOLDBERG  
**FLOWMETER: JOHN REYES**  
Flow meter reading start: **12913000 gals**  
Flow meter reading end: **14632000 gals**

<table>
<thead>
<tr>
<th>Elapsed Time (min.)</th>
<th>Date &amp; Time (AM)</th>
<th>Pumping Rate (gpm)</th>
<th>DTW (Inches)</th>
<th>Observed Drop (feet)</th>
<th>Salinity (ppm)</th>
<th>Chlorides (mg/l)</th>
<th>Temp. (°F)</th>
<th>Cond. (μS/cm)</th>
<th>Remarks</th>
</tr>
</thead>
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</table>

Water Resources Associates  
Form2CRT.com  
Sheet 1 of 3
### STEP-DRAWDOWN TEST RECORD

**Test No.: 02-02-01-99**

**Well Name:** KEALIA HAKAI 2A  
**Project:**  
**State Well No.:** 0618-10  
**Island:** KAJAI

#### DEPTH (Below Ground Surface):
- **Solid Casing:** 95  
- **Perforated Casing:**  
- **Total Depth:** 195  
- **Depth to Water:** 31  
**Remarks:** TOP OF CASING

#### TEST PUMP:
- **Type:** SUBMERSIBLE  
- **Intake Elev:**  

#### ELEVATIONS (Mean Sea Level):
- **Ground Surface:** 9+  
- **Top of Casing:** 11 ft.  
- **Rotary Table:**  
- **Bot. of Solid Casing:**  
- **Bot. of Perf. Casing:**  
- **Bot. of Well:**  
- **Static Water Level:**

#### DRAWDOWN MEASUREMENT:
- **Discharge Measurement:**  
- **Present at Test:** STEVE GOLDBERG

#### Elapsed Time & Pumping Rate
<table>
<thead>
<tr>
<th>Time (min)</th>
<th>Date &amp; Time</th>
<th>Pumping Rate (gpm)</th>
<th>DTW Obs 1 (inches)</th>
<th>DTW Obs 2 (feet)</th>
<th>Sample No.</th>
<th>Chlorides (mg/L)</th>
<th>Temp. (°F)</th>
<th>Cond. (μS/cm)</th>
<th>Remarks</th>
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<td></td>
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<td></td>
<td>Start pump</td>
</tr>
<tr>
<td>-15</td>
<td>12:45 PM</td>
<td>0</td>
<td>30 3/4</td>
<td>2.67”</td>
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<td></td>
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</tr>
<tr>
<td>1</td>
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<td></td>
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<td>36</td>
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Flowmeter reading start: 1274,9000 gals  
Flowmeter reading end: 1291,3000 gals
## Step-Drawdown Test Record (Cont’d)

**Well Name:** KAILIA MAKAI 2A  
**State Well No.:** 061Q-10  
**Test No.:**

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<th>Date &amp; Time</th>
<th>Pumping Rate (gpm)</th>
<th>DTW Reading (ft)</th>
<th>Stepdown Change in Water Surface (in.)</th>
<th>Sample No.</th>
<th>Chlorides (mg/L)</th>
<th>Temp. (°F)</th>
<th>Cond. (µS/cm)</th>
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<td>3' 9 75&quot;</td>
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<td>34 1/4</td>
<td>2' 10 25&quot;</td>
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<tr>
<td>5:30 PM</td>
<td>5:30 PM</td>
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<td>33 1/4</td>
<td>2' 9 25&quot;</td>
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<td>33 1/4</td>
<td>2' 9 25&quot;</td>
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<td>33 1/4</td>
<td>2' 9 25&quot;</td>
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<td></td>
</tr>
</tbody>
</table>
Oasis Water Systems, Inc.
P.O BOX 535
KILAUEA, HI 96754
Phone: 808-828-6876

Well 1A

2-0619-09 KELUA 1A
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART I
Well Construction

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-3228. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwrml

| 1. State Well No.: 0618-09 Well Name: Kealia Makai Well 1A Island: Kauai |
| 2. Address: Kealia Tax Map Key: 4-7-03:2 |
| 3. Drilling Company: Oasis water Systems Inc. Rotary Percussion Other |
| 4. Drilling method used during construction: (describe) Top Head Direct Rotary |
| 5. Date Well Construction (drilled, cased, grouted) completed: 1/4/01 Attach Driller's Log (7/26/99 DL Form) Month/day/year |
| In addition to the driller's log, if a geologic log was prepared, please submit with this form. |
| 6. Was the subject well cored? Yes No |
| 7. Initial water-level encountered 5' 10" ft. below ground Date and time of measurement: 12/6/00 time |
| 8. Step-Drawdown Test completed? Yes No Attach Step-Drawdown Test form (12/17/97 SDPTD Form) |
| 9. Constant Rate Aquifer Test completed? Yes No Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form) |
| Parameters prior to pump test: |
| 10. Water-level: 7 ft. above msl Date and time of measurement: 1/25/01 8am |
| 11. Chloride: 45 ppm Date and time of sampling: 1/25/01 8am |
| 12. Temperature: 72 °F Date and time of measurement: 1/25/01 8am |
| 13. Fill in the as-built section on the other side of this sheet. |
| 15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.) |
| 16. Remarks: |

Licensed Driller (print) Steve Goldberg C-57 Lic. No. 21457 Date 2-14-01

Surveyor (print) [Signature] L.P.L.S. Lic. No. Date

Permittee (print) [Signature] Date
# WELL COMPLETION REPORT - PART I

**State Well No.:** 8819-09  
**Well Name:** Kealia Makal Well 1A  
**Island:** Kauai

### 3. Drilling Company:
- **Gillala water Systems Inc.**

### 4. Drilling method used during construction:
- **(describe)** Top Head Direct Rotary

### 5. Date Well Construction (drilled,cased,grouted) completed:
- **1/4/01**

### 6. Was the subject well cased?  
- **Yes**

### 7. Initial water-level encountered: 8' 19" ft. below ground  
- Date and time of measurement: 12/9/00

### 8. Step 1: Drawdown Test completed?  
- **Yes**

### 9. Constant Rate Aquifer Test completed?  
- **Yes**

### 10. Water-level: 7' ft. above msl  
- Date and time of measurement: 1/25/01 8am

### 11. Chloride: 48 ppm  
- Date and time of sampling: 1/25/01 8am

### 12. Temperature: 72°F  
- Date and time of measurement: 1/25/01 8am

### 13. Fill in the re-built section on the other side of this sheet.

### 14. Attach plot plan and surveyor's stamped elevation report.

### 15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)

### 16. Remarks:

---

**Licensed Driller (print):** Shae Goldberg  
**C-57 Lic. No.:** 21457  
**Signature:** [Signature]  
**Date:** 2-14-01

**Surveyor (print):**  
**L. P. L. S. Lic. No.:**  
**Signature:**  
**Date:**

**Permittee (print):** Justin Hughes  
**Signature:** [Signature]  
**Date:** 2-14-01
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

WELL COMPLETION REPORT - PART I
Well Construction

Instructions: Please print or type and send completed report (with attachments, if applicable) to the Commission on Water Resources Management, P.O. Box 931, Honolulu, Hawaii 96803. The Commission may not accept incomplete reports. This form shall be submitted within 90 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Construction Branch at 808-668-6836. For updates to this form or additional information, please visit our website at http://www.state.hawaii.gov/wrm/page/.

1. State Well No.: 0619-07 Well Name: Kealia Makai Well 1A Island: Kauai
2. Address: Kealia Tax Map Key: 4-7-03-3
   ☑ Rotary ☐ Percussion ☐ Other
4. Drilling method used during construction: (describe) Top Head Direct Rotary
5. Date Well Construction (drilled, cased, grouted) completed: 1/4/01 Attach Driller's Log (7/30/99 Dr. Form)

In addition to the driller's log, if a geologic log was prepared, please submit with this form.

6. Was the subject well cored? ☐ Yes ☑ No
7. Initial water-level encountered 0' 0" ft. below ground Date and time of measurement: 12/5/00
8. Step-Drawdown Test completed? ☐ Yes ☐ No
9. Constant Rate Aquifer Test completed? ☐ Yes ☐ No

Parameters prior to pump test:
10. Water-level: 7" ft. above msl Date and time of measurement: 1/26/01 8am
11. Chloride: 45 ppm Date and time of sampling: 1/26/01 8am
12. Temperature: 72 °F Date and time of measurement: 1/26/01 8am
13. Fill in the as-built section on the other side of this sheet.
15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)
16. Remarks:

Licensed Driller (print)  Signed: Stas Goldberg Date: 2-14-01
C-67 Lic. No. 21457

Surveyor (print)  Signed: Dennis M. Eaver Date: 2/19/01
L.P.L.S. Lic. No. 4383
13. AS-BUILT WELL SECTION (Please attach as-built if different from diagram provided below)

Elevation at top of casing: 11' ft., msl

Minimun of 3' radius & 4' thick concrete Pad

Ground elevation: 9' ft., msl

Hole Diameter: 22", in.

Solid Casing: (≥ 90% x (Ground Elev-Water Level Elev))
- Length: 95' ft.
- Nominal Diameter: 12" in.
- Wall Thickness: 5/16" in.
- Bottom Elevation: -84' ft., msl

Open Casing: □ Perforated □ Screen
- Length: _________ ft.
- Nominal Diameter: _________ in.
- Wall Thickness: _________ in.
- Bottom Elevation: _________ ft., msl

Open Hole:
- Length: 100' ft.
- Diameter: 11" in.
- Bottom Elevation: -184' ft., msl

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- Stainless Steel: compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other A606 Type 4
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1765 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: compliant with (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1765 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to ensure that your as-built is in compliance with applicable standards.
NOTE:
Bench Mark
USGS Brass Disk at old
Kealia school building
Elev. = 10.42 ms1

WELL ELEVATION

Top 12" Dia. pipe
Elev. = 11.10

Cong. Slab
Elev. = 10.00

Ground

WELL NO. 2-0618-09
KEALIA MAKAI WELL 1-A

Tax Map Key: 4-7-03
Kealia, Kauai, Hawaii
Date of Survey: February 16, 2001

This work was prepared by me or under my supervision

Signature
ESAKI SURVEYING & MAPPING, INC.
Drillers Log Kealia Well #1a  2-0618-09

All references in feet are from ground surface

12/22/00 through 12/31/00

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>topsoil</td>
</tr>
<tr>
<td>4</td>
<td>brown clay</td>
</tr>
<tr>
<td>7-17</td>
<td>sand and marine deposits</td>
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<tr>
<td>17-23</td>
<td>very hard blue rock</td>
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<tr>
<td>23-50</td>
<td>red/brown clay</td>
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<tr>
<td>50-92</td>
<td>red/brown clay with sand and cinders</td>
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<tr>
<td>92-103</td>
<td>blue rock</td>
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<tr>
<td>103-134</td>
<td>broken rock, cinders, and sand</td>
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<tr>
<td>134-151</td>
<td>Puka rock, coral streaks (water zone)</td>
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<tr>
<td>151-164</td>
<td>blue rock</td>
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<tr>
<td>164-188</td>
<td>Puka rock (water zone)</td>
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<tr>
<td>188-195</td>
<td>blue rock</td>
</tr>
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</table>
**CONSTANT RATE TEST RECORD**

- **Well Name:** KEOUA HAKAI IA
- **Project:**
- **State Well No.:** 0618-09
- **Island:** KAUAI

**DEPTH (Below Ground Surface):**
- **Solid Csg:** 95 ft
- **Perforated Csg:** ____________ ft
- **Total Depth:** 195 ft
- **Depth to Water:** 28 1/2 ft

**Remarks:** ____________

**ELEVATIONS (Mean Sea Level):**
- **Ground Surface:** ____________ ft
- **Top of Casing:** ____________ ft
- **Rotary Table:** ____________ ft
- **Bot. of Solid Csg:** ____________ ft
- **Bot. of Perf. Csg:** ____________ ft
- **Bot. of Well:** ____________ ft
- **Static Water Level:** ____________ ft

**TEST PUMP:**
- **Type:** SUBMERSIBLE
- **Intake Elev.:** 47 ft

**DISCHARGE MEASUREMENT:**
- Flowmeter: ____________
- Manometer: ____________
- Pressure Gage: ____________
- ELECT. Probe: ____________

**PRESENT AT TEST:**
- **Steve Goldenberg, Rudy Villon, Bred Lundquist**

<table>
<thead>
<tr>
<th>Elapsed Time (min.)</th>
<th>Date &amp; Time</th>
<th>Pumping Rate (gpm)</th>
<th>DTW Reading</th>
<th>Observed Elevation (feet)</th>
<th>Sample No.</th>
<th>Chlornides (mg/L)</th>
<th>Temp. (°F)</th>
<th>Cond. (μS/cm)</th>
<th>Remarks</th>
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<td>2' 4.75''</td>
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<td></td>
</tr>
<tr>
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<td>11:45 AM</td>
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<td>28 1/4</td>
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<td>1.5</td>
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<td></td>
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<tr>
<td>2</td>
<td></td>
<td>42 1/4</td>
<td>3' 6.25''</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td></td>
<td>42 3/4</td>
<td>3' 6.75''</td>
<td></td>
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</tr>
<tr>
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<td>3' 7.5''</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>12:20 PM</td>
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<td>3' 7.5''</td>
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<tr>
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<td>12:25 PM</td>
<td>42 1/2</td>
<td>3' 7.5''</td>
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Water Resource Associates
Form2CRT.com
Constant Rate Test Record (Cont'd)

Well Name: KEALIA MAKAI 1A  State Well No. 0618-09  Test No. 1

<table>
<thead>
<tr>
<th>Elapsed Time (min.)</th>
<th>Date &amp; Time (hr.)</th>
<th>Pumping Rate (gpm)</th>
<th>BTW Reading (feet)</th>
<th>Observed Drop (feet)</th>
<th>Sample No.</th>
<th>Chlorides (mg/l)</th>
<th>Temp. (°F)</th>
<th>Cond. (μS/cm)</th>
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<td>2' 8&quot;</td>
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<tr>
<td>29.40</td>
<td>1:00 PM</td>
<td>0</td>
<td>32</td>
<td>2' 8&quot;</td>
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<td>29.55</td>
<td>1:15 PM</td>
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<td>32</td>
<td>2' 8&quot;</td>
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<td>30.00</td>
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<td>31 3/4</td>
<td>2' 7.75&quot;</td>
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<td>30.15</td>
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<td>31 1/4</td>
<td>2' 7.25&quot;</td>
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<td>0</td>
<td>31</td>
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<td>2' 6.75&quot;</td>
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</table>
## STEP-DRAWDOWN TEST RECORD

**Well Name**: KALIA MAKAI 1A  
**Project**:  
**State Well No.**: O618-O9  
**Island**: KAUA'I

### DEPTH (Below Ground Surface):
- **Solid Casing**: 95"  
- **Perforated Casing**: —  
- **Total Depth**: 195 ft  
- **Depth to Water**: 28 1/4 ft

### ELEVATIONS (Mean Sea Level):
- **Ground Surface**: — ft  
- **Top of Casing**: 11 ft  
- **Rotary Table**: — ft  
- **Bot. of Solid Casing**: — ft  
- **Bot. of Perf. Casing**: — ft  
- **Bot. of Well**: — ft  
- **Static Water Level**: — ft

### TEST PUMP:
- **Type**: Submersible  
- **Intake Elev.**: 47 ft

### DISCHARGE MEASUREMENT:
- **Flowmeter**: Yes  
- **Other**: No

### PRESENT AT TEST:
- **Steve Goldberg**

### Drawdown Measurement:

<table>
<thead>
<tr>
<th>Elapsed Time (min)</th>
<th>Date/Time</th>
<th>Pumping Rate (gal/min)</th>
<th>DTWI Piping Reading (inches)</th>
<th>Observed Variable</th>
<th>Sample</th>
<th>Chlorides (mg/l)</th>
<th>Temp. (°F)</th>
<th>Cond. (µS/cm)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1:30 PM</td>
<td>0</td>
<td>28 1/4</td>
<td>2' 42 1/8&quot;</td>
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<td>-15</td>
<td>1:45 PM</td>
<td>0</td>
<td>28 1/4</td>
<td>2' 42 1/8&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-30</td>
<td>1:20 PM</td>
<td>0</td>
<td>28 1/4</td>
<td>2' 42 1/8&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Flowmeter reading start: ________ gals  
Flowmeter reading end: 111,1000 gals

Start pump
Oasis Water Systems, Inc.
P.O BOX 535
KILAUEA, HI 96754
Phone: 808-828-6876

Oct. 23 2000

State Of Hawaii
Water Commission
ATT: Lenore Nakama
Fax # 808-587-0219

Dear Lenore,

Please be advised that Oasis Water, Inc. License No. C-21457, will be beginning work on the Kealia 1a &2a Wells # 0618-09 &10 in the next few weeks.

Sincerely,

Steve Goldberg
Oasis Water Systems Inc.
In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-188, entitled "Water Use, Wells, and Stream Diversion Works," this document permits the construction and testing of Kealia 1A & 2A (Well Nos. 0618-09 & 10) at Kealia, Kauai, TMC 4-7-032, subject to the Hawaii Well Construction & Pump Installation Standards (123-97) which include but are not limited to the following conditions:

1. The Chairman of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and shall be allowed to inspect installation activities in accordance with §13-188-15, Water Administrative Rules.

2. The well construction permit shall be for the construction and testing of the well only. A minimum 1 X 4 X 8 inch monitor tube shall be permanently installed, in a manner acceptable to the Chairman, to accurately record water levels. The permittee, well operator, and/or well owner shall cooperate with the Chairman and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall commit to the Chairman the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairman.

3. In basin ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basin ground water unless otherwise authorized by the Chairman.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high marine, and to revegetate any clear-cut areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials, or concentrations of shell or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department of Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established stream flow standards. This permit is the authorization to construct the well shall not constitute a determination of associated water rights.

7. The following shall be submitted to the Chairman within sixty (60) days after completion of work:
   b. Elevation (referred to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well
   d. Plot plan and map showing the exact location of the well
   e. Complete pumping test records, including rate, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCP). If the HWCP is not followed and as a consequence water is wasted or contaminated, it lies on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned in less than six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be revoked by the Commissioner upon a showing of good cause and good faith performance. A request to extend the permit shall be submitted to the Commissioner no later than 30 months prior to the date the permit expires. If the commencement date is not met, the Commissioner may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-188-15(7) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the permittee, assignee, operators, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmitter letter are incorporated herein by reference.

Date of Approval: October 19, 2000
Expiration Date: October 19, 2002

[Signature]
TIMOTHY E. JENKINS/Chairperson
Commission of Water Resource Management
Dear Ms. Nishimitsu:

Well Construction Permit
Kealia 1A & 2A (Well Nos. 0618-09 & 10)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for your permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 13:

Special Conditions

1. Attached for your information is a copy of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

2. Except for salt-water wells, any well constructed in basal aquifers for the purpose of nonpotable or potable water withdrawal shall be initially designed and pump tested at a depth below sea level not exceeding one-fourth of the theoretical thickness (41 times the head) of the basal ground-water body, unless authorized by the chairperson.

3. The annular space of wells to be grouted must be a minimum of three inches all around the casing to permit effective placement of grout with a tremie pipe having a minimum diameter of 1½ inches. Should casing with collars be used, the drilled hole shall be increased to provide a minimum three-inch annular space at the collars.

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit.

Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.
IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Lenore Nakama of the Commission staff at 587-0218 or toll-free at 274-3141, extension 70218.

Aloha,

[Signature]

TIMOTHY E. JOHN
Chairperson

Enclosures

C: Dan Lum, Water Resource Associates
In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Kealia 1A & 2A (Well Nos. 0618-09 & 10) at Kealia, Kauai, TMK 4-7-03:2, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/87) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1/4-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department's Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Pot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: October 19, 2000
Expiration Date: October 19, 2002

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: ___________________________ Date: ________________
Printed Name: ___________________________ Firm or Title: ___________________________
Driller's Signature: ___________________________ C-57 License #: ___________________________ Date: ________________
Printed Name: ___________________________ Firm or Title: ___________________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachment
C: USGS
Department of Health's Safe Drinking Water, Wastewater, and Clean Water Branches
Kauai Department of Water Supply
Dan Lum, Water Resource Associates
## SECTION 1: WELL LOCATION INFORMATION

<table>
<thead>
<tr>
<th>Island</th>
<th>KAUAI</th>
<th>Proposed Use</th>
<th>Aquifer System</th>
<th>LIHUE</th>
<th>Proposed Withdrawal</th>
<th>Domestic</th>
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## SECTION 2: WELL SECTION DATA (enter data in grey cells only)

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<tr>
<th>Elevation at top of casing</th>
<th>Solid Casing Material</th>
<th>Ground Elevation</th>
<th>Cement Grout</th>
<th>Rock Packing</th>
<th>Hole Diameter</th>
<th>Total Depth</th>
<th>Estimated Head</th>
<th>Calculated Aquifer Thickness</th>
<th>County Water Supply (Y/N ?)</th>
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<th>Elevation at top of casing</th>
<th>ft., m.s.l.</th>
<th>Solid Casing Designation</th>
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<th>Length</th>
<th>ft.</th>
<th>Diameter</th>
<th>ft.</th>
<th>Wall Thickness</th>
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## SECTION 3: CHECKLIST (values to check are shaded)

### Well Depth
- Theoretical Thickness of Aquifer: 410 ft.
- 1/4 Aquifer Thickness: 102.5 ft.

### Well Casing
- Depth of Well below Sea Level: 185 ft. too deep (refer to HWCPIS Section 2.2)
- Minimum Wall Thickness
  - Material: Steel
  - County or Non-County: non-county
  - Minimum Thickness per standards: 0.250 in.
  - Well Thickness Provided: 0.313 in. okay (refer to HWCPIS Section 2.4 c)
  - Minimum Length of Solid Casing
    - 90% of ground to top of aquifer: 0 ft.
    - Length of solid casing provided: 95 ft. okay
    - Casing Material: #4 #4 #4 (refer to HWCPIS Section 2.4 d)
  - Annular Space
    - If the cell above reads #N/A, reference HWCPIS)
  - Depth of Grouting
    - Calculated Depth of Grouting: 0 ft.
    - Depth of Grouting provided: 95 ft. okay
    - Thickness of Annular Space: 2.938 in. too small (refer to HWCPIS Section 2.6 d)
Facsimile Transmittal of Well Construction/Pump Installation Permit Application

Kealia Wells 1A and 2A  TMK: (4) 4 - 7 - 3 : 2

[ ] For the applicant's information, a source of possible wastewater contamination [ ] is
[ ] is not [ ] may be located near the proposed well site (information attached).

[ ] Other relevant DOH rules/regulations, information or recommendations are attached.

[ ] No comments/objections/records on above property.

Contact Person: Wali Kejiwara  Phone: 984-294

Signed: Emi H. Kejiwara  Date: 10-19-2000
Send reply to: "Joe T Tateyama" <jttateyama@health.state.hi.us>
From: "Joe T Tateyama" <jttateyama@health.state.hi.us>
To: "Lori Kajiwara" <lkajiwara@oha.health.state.hi.us>
Subject: Re: well info request
Date sent: Thu, 18 Oct 2000 16:30:06 -1000

RE: Comments on Proposed Well Construction @ TMK 4-7-3:2

Lori, these are comments I gave to Harold while you were out. Do you need any more information?

Our records do not reflect any existing IWS on that large parcel. It appears that the parcel is all former sugar cane land which don't have any residences. Don't know where the proposed well will be sited but the only existing cesspools on record on Plat 3 are on parcels 7 and 11 (an area with parcels having both residences and pig farms). If the well will be sited near the existing Kealia wells closer to Kuhio Highway, there are housing developments on TMK 4-7-5: parcels 1 thru 38, TMK 4-7-6: parcels 1 thru 18, plus the Kealia Post Office/Store complex on TMK 4-7-3:8 which are presumably on cesspools. Must a new well be sited at least 1000 feet from these areas?

Don't know if this is what you are looking for in comments. Let me know if there is more information that you need.

Whoops! (Added information)
When I went to refile the two CP cards mentioned in my last email, I found two others:

TMK 4-7-3:4 and one without a parcel number but listed Lihue Plantation as owner (could be at Post Office area or from the old Kealia Camp located just mauka of Kuhio Highway).

— Original Message —-
From: "Lori Kajiwara" <lkajiwara@oha.health.state.hi.us>
To: <jttateyama@health.state.hi.us>
Sent: Thursday, October 18, 2000 3:50 PM
Subject: well info request

> hi joe
> >
> > any info on tmk: (4) 4-7-3:2 - kealia wells 1 a and 2 a
> >
> > thanks, kaj :}

Lori Kajiwara
FACSIMILE REQUEST AND COVER SHEET

Wastewater Branch
Department of Health
919 Ala Moana Blvd. Room 309
Honolulu, Hawaii 96814-4920
(808) 586-4294  Fax (808) 586-4300

Date 10-19-2000  Total # of Pages 3 4

To: [X] Lenore Nakama  [ ] Ryan Imata  [ ] Charley Ice

Office: Commission on Water Resource Management, Dept. of Land & Natural Resources

Phone: (808) 587-0218  Fax: (808) 587-0219

From: Harold Yee, Supervisor, Planning/Design Section Supervisor

Phone: (808) 586-4294  Fax: (808) 586-4300

Message:

Please read the attached findings of Well Construction/Pump Installation Permit Application information as requested. Should you have any further questions, please do not hesitate to contact Lori Kajiwara at (808) 586-4294 or email Lkajiwara@cha.health.state.hi.us

Thank you.
TO: Honorable Bruce S. Anderson, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch
FROM: Timothy E. Johns, Chairperson
   Commission on Water Resource Management
SUBJECT: Well Construction/Pump Installation Permit Applications
   Kealia 1A & 2A (Well Nos. 0618-09 & 10)

Transmitted for your review and comment is a copy of the captioned well applications.

We would appreciate your comments on the captioned applications for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by October 25, 2000.

Please find the attached maps to locate the proposed wells. If you have any questions about these permit applications, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (serving 25 or more people at least 80 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 80 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

[ ] It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

[ ] For the applicant's information, a source of possible wastewater contamination [ ] is [ ] not located near the proposed well site (information attached).

[ ] Other relevant DOH rules/regulations, information, or recommendations are attached.

[ ] No comments/objections

Contact Person: Melvin S. Hamano
Phone: 586-4268
Signed: Shaler J. Hamano
Date: 10/18/00
TO: Honorable Bruce S. Anderson, Director Department of Health

Attention: Dennis Tulang, Wastewater Branch

FROM: Timothy E. Johns, Chairperson Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Applications Kealia 1A & 2A (Well Nos. 0618-09 & 10)

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LN:ss

Attachment(s)

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Other relevant DOH rules/regulations, information, or recommendations are attached.

No comments/objections.

Contact Person: [Name]
Phone: [Number]

Signed: [Name] Date: [Date]
TO: Dean Y. Uchida, Administrator  
Land Division  

FROM: Linnel T. Nishioka, Deputy Director  
Commission on Water Resource Management  

SUBJECT: Well Construction/Pump Installation Permit Applications  
Kealia 1A & 2A (Well Nos. 0618-09 & 10)  

Transmitted for your review and comment is a copy of the captioned well applications which include a request for pump installation permits.

We would appreciate your comments on the captioned applications with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by October 25, 2000.

Please find the attached maps to locate the proposed wells. If you have any questions about these permit applications, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

LN:ss
Attachment(s)

RESPONSE:
[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.

X[ ] A water lease/permit is not required of this applicant.

[ ] A water lease/permit has been obtained by the applicant through lease no. ____________________________.

[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

X[ ] Other comments: The original source of private title is Land Commission Award 11216:6 issued between 1845 and 1855.

Contact Person: Gary Martin           Phone: 587-0421
Signed: Gary Martin                  Date: 10/16/00
Kealia Mauka Holdings, LLC
 c/o Ms. Lorna Nishimitsu
 Law Offices of Walton Hong
 3135A Akahi St.
 Lihue, HI 96766

Dear Ms. Nishimitsu:

Well Construction/Pump Installation Permit Applications for Well Nos. 0618-09 & 10

We acknowledge receipt, on September 26, 2000, of your completed Well Construction/Pump Installation permit applications for Kealia 1A & 2A (Well Nos. 0618-09 & 10). You can expect your application to be processed within ninety (90) days from this date.

For your information, the process of constructing a well is normally regulated and permitted in two (2) steps. First, a well construction permit is issued for drilling and testing purposes only. Based upon information provided by you through a Well Completion Report Part 1 (Well Construction), a pump installation permit (upon completed application) may then be issued to authorize pump work. If a pump is installed then a Well Completion Report Part 2 (Pump Installation) is required.

If you have any questions about your permit application, please contact Lenore Nakama of the Commission staff at 587-0218 or toll-free at 274-3141, extension 70218.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LN:ss

C: Dan Lum, Water Resource Associates
TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch

FROM: Timothy E. Johns, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Applications
Kealia 1A & 2A (Well Nos. 0618-09 & 10)

Transmitted for your review and comment is a copy of the captioned well applications.

We would appreciate your comments on the captioned applications for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by October 25, 2000.

Please find the attached maps to locate the proposed wells. If you have any questions about these permit applications, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

RESPONSE:

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[ ] Other relevant DOH rules/regulations, information, or recommendations are attached.

[ ] No comments/objections

Contact Person: ________________________          Phone: ______________

Signed: ________________________________          Date: ______________
TO: Dean Y. Uchida, Administrator  
Land Division  

FROM: Linnel T. Nishioka, Deputy Director  
Commission on Water Resource Management  

SUBJECT: Well Construction/Pump Installation Permit Applications  
Kealia 1A & 2A (Well Nos. 0618-09 & 10)  

OCT 10 2000  

Transmitted for your review and comment is a copy of the captioned well applications which include a request for pump installation permits.  

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Please find the attached maps to locate the proposed wells. If you have any questions about these permit applications, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.  

LN:ss  
Attachment(s)  

RESPONSE:  

[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.  

[ ] A water lease/permit is not required of this applicant.  

[ ] A water lease/permit has been obtained by the applicant through lease no. _______________________.  

[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.  

[ ] No objections  

[ ] Other comments:  

Contact Person: ____________________________ Phone: ______________  

Signed: _________________________________ Date: ______________
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<th>YR</th>
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REMARKS: LINE (1) 08/18-19 x 10
LINE (2) 
LINE (3) 
LINE (4) 

WATER RESOURCE ASSOCIATES
3155 BISHOP ST., STE 1706
HONOLULU, HI 96813
September 18, 2000

Ms. Linnel T. Nishioka
Deputy Director
Commission on Water Resource Management
Dept. of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Nishioka:

Application for Permit
Kealia Wells 1-A and 2-A, Kauai (TMK 4-7-03:2)

On behalf of Kealia Mauka Holdings, LLC, whom we represent as consultants, we enclose two applications for well construction and pump installation permits for Kealia Wells 1-A and 2-A, together with a topographic map and a property tax map (3 copies each).

Also enclosed is a check for $50.00.

We would appreciate your earliest review and approval of these applications. Please call us if you have any questions and also please send us a copy of the permits when approved.

Sincerely,

[Signature]

DAN LUM

Enc.
c: Mr. Justin Hughes, c/o Lorna Nishimitsu w/enc.
Mr. Charles Lipscomb w/enc.
APPLICATION FOR PERMIT

WELL & PUMP INFORMATION: (Please fill in the diagram on the back of this form)

1. WELL LOCATION/NAME: Kealia Well 1-A
   Island: Kauai
   Address: Kealia, Kauai
   Tax Map Key: 4-7-032

   Align the relevant portion of (a) a 7.5-Minute Series USGS topographic map (scale 1"=24,000), and (b) a property tax map, showing well location referenced to established property boundaries:

2. PROPOSED WORK:
   (Check all that apply)
   - Drill New Well
   - Deepen
   - Install New Pump
   - Modify Existing Well
   - Redrill
   - Modify Pump
   - Abandon/Scal *
   - Replace Pump
   * Well No: ________ Be sure to complete and submit well abandonment report upon completion of work.

3. CONSTRUCTION:
   - Dig
   - Bored
   - Driven
   - Drilled
   - Radi
   - Is this well a part of a battery of wells? Yes No (Please describe)

4. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 600 gallons per minute
   - Pump Type (Check one):
     - Deep Well Turbine
     - Submersible
     - Centrigugal
   - Powered by:
     - Diesel
     - Gas
     - Electric, rated horsepower 50 HP

5. PROPOSED USE: (Check all that apply)
   - Domestic (including hotels, stores, etc.)
   - Municipal (including hotels, stores, etc.)
   - Irrigation (crop)
   - Military

6. PROPOSED METHOD OF FLOW MEASUREMENT:
   - Flowmeter
   - Open pipe
   - Well
   - Orifice
   - Other

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 860,000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:

8. OTHER IMPORTANT INFORMATION:
   - Pending Actions:
     - CDUA
     - SMA
     - EIS
     - EA
     - None
     - Other

9. If a pump installation permit request is part of this application, please answer the following: THE LANDOWNER CERTIFIES THAT THE SUBJECT PROPERTY, OR A PORTION THEREOF, WAS OR WAS NOT A STATE OF HAWAII LAND PATENT GRANT ISSUED AFTER 1860. (Please check with your little search company or the Land Division, Department of Land and Natural Resources at 587-0414 for help.)

10. REMARKS, EXPLANATIONS:
   (If more space is needed, please attach additional sheet)

I understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 30 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of cumulative water rights and shall not guarantee the pump capacity or future use of the permitted pump capacity.

Well Owner: Kealia Mauka Hides, LLC
Landowner: Kealia Mauka Hides, LLC
Contractor: 

Signature: ____________ Signature: ____________
Date: August 28, 2000 Date: August 15, 2000

Field Checked By: ___________________________ Longitude: ___________________________ Aquifer System Name: ____________
Date: ___________________________ Latitude: ___________________________ State Well No: ____________

+ amended per 9/20/00 telecom w/Dan Lum.
For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = \( \frac{\text{Water Elevation} - \text{Water Level Elevation}}{4} \)  

Example: Estimated + 2 ft. Water Level Elev. \( \rightarrow \) Bottom Elevation of Well Limit = \( \frac{2 - 5.5}{4} \) = -1.85 ft.

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

**Solid Casing Material:**
- Steel: compliant with (check one or more):  
  - ANSI/AWWA C200  
  - API Spec. 5L  
  - ASTM A53  
  - ASTM A139
- Stainless Steel: compliant with (check one or more):  
  - API Spec. 5L  
  - ASTM A53  
  - ASTM A139
- ABS Plastic: compliant with ASTM D2159 and ASTM D1527: compliant with (check one or more):  
  - Schedule 40  
  - Schedule 80
- PVC Plastic: compliant with ASTM D498 and (ASTM D1785 or ASTM D2241): compliant with (check one or more):  
  - Schedule 40  
  - Schedule 80
- Thermoset Plastic: compliant with (check one or more):  
  - Filament Wound Resin Pipe conforming to ASTM D2996  
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997  
  - Reinforced Plastic Mastic Pressure Pipe conforming to ASTM D3517  
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950  
  - PTFE Fluorocarbon Tubing conforming to ASTM D3299  
  - FEP Fluorocarbon Tubing conforming to ASTM D3299

**Open Casing Material:**
- Steel: compliant with (check one or more):  
  - ANSI/AWWA C200  
  - API Spec. 5L  
  - ASTM A53  
  - ASTM A139
- Stainless Steel: compliant with (check one or more):  
  - API Spec. 5L  
  - ASTM A53  
  - ASTM A139
- ABS Plastic: compliant with ASTM D2159 and ASTM D1527: compliant with (check one or more):  
  - Schedule 40  
  - Schedule 80
- PVC Plastic: compliant with ASTM D498 and (ASTM D1785 or ASTM D2241): compliant with (check one or more):  
  - Schedule 40  
  - Schedule 80
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  - Reinforced Plastic Mastic Pressure Pipe conforming to ASTM D3517  
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950  
  - PTFE Fluorocarbon Tubing conforming to ASTM D3299  
  - FEP Fluorocarbon Tubing conforming to ASTM D3299
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

[Form Header]

APPLICANT INFORMATION:

1. (a) WELL OWNER: Kealia Mauka Hides, LLC
   Contact Person: Dan Lim
   Phone: 808-528-0074
   Mailing Address: c/o Lorna Nishimatsu, Law Offices of Walton Hong, 3135A Akahi St., Honolulu, HI 96816
   Fax: 245-5125

2. LAND OWNER: Kealia Mauka Hides, LLC
   Contact Person: Lorna Nishimatsu
   Phone: 808-245-4757
   Mailing Address: c/o Law Offices of Walton Hong, 3135A Akahi St., Honolulu, HI 96816
   Fax:

3. CONTRACTOR: N/A
   Contact Person: Phone:
   Mailing Address:
   Fax:
   E-mail:

WELL & PUMP INFORMATION:

2. WELL LOCATION/NAME: Kealia Well 2-A
   Island: Kauai
   Address: Kealia, Kauai
   Tax Map Key: 'A-7-0312

3. PROPOSED WORK:
   (Check all that apply)
   ☐ Drill New Well
   ☐ Deepen
   ☐ Install New Pump
   ☐ Modify Existing Well
   ☐ Redrill
   ☐ Modify Pump
   ☐ Abandon/Seal
   ☐ Replace Pump

4. CONSTRUCTION:
   ☐ Dig
   ☐ Bored
   ☐ Driven
   ☐ Ordered
   ☐ Radial
   ☐ Is this well part of a battery of wells? ☐ Yes ☐ No (Please describe):

5. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: 600 gallons per minute
   Pump Type (Check one):
   ☐ Deep Well Turbine
   ☐ Submersible
   ☐ Centrifugal
   ☐ Rotary
   ☐ Rotary-Displacement
   ☐ Reciprocating
   ☐ Rotary-Gear
   ☐ Impulse

6. PROPOSED USE:
   (Check all that apply)
   ☐ Municipal (including hotels, stores, etc.)
   ☐ Domestic (individual, non-commercial water system)
   ☐ Irrigation (crop)
   ☐ Industrial
   ☐ Other (explain):

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 860,000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   ☐ Flowmeter
   ☐ Open-pipe
   ☐ Well
   ☐ Office
   ☐ Other (explain):

OTHER IMPORTANT INFORMATION:

8. PENDING ACTIONS:
   ☐ CUDA
   ☐ SMA
   ☐ BE
   ☐ EA
   ☐ NONE
   ☐ Other (explain):

9. If a pump installation permit request is part of this application, please answer the following: THE LANDOWNER CERTIFIES THAT THE SUBJECT PROPERTY, OR A PORTION THEREOF, WAS OR WAS NOT A STATE OF HAWAII LAND PATENT GRANT ISSUED AFTER 1980. (Please check with your title search company or the Land Division, Department of Land and Natural Resources at 587-0414 for help.)

10. REMARKS, EXPLANATIONS:

I understand that approval of this application attaches the following conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/bandonment report within 30 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner: Kealia Mauka Hides, LLC
Landowner: Kealia Mauka Hides, LLC
Contractor:

Signature: [Signatures]
Date: [Dates]

Field Checked By: ____________________________
Date: ____________________________
Longitude: ____________________________
Aquifer System Name: 20104
State Well No.: 0618-16

*Amended for 9/24/00 by [Signature]

TOTAL P.05
For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of a quifer thickness or, Bottom Elevation of Well Limit = (Water Elevation - 4 X Water Level Elevation)

Example: Estimated + 2 ft. Water Level Elev. + Bottom Elevation of Well Limit = (2 + 2) = -18.5 ft.

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

Solid Casing Material:
- Steel: compliant with (check one or more):
  - ANSI/AWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139

- Stainless Steel: compliant with (check one):
  - ASTM A403
  - ASTM A312

- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one)
  - Schedule 40
  - Schedule 80

- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one)
  - Schedule 40
  - Schedule 80

- Thermoset Plastic: (check one)
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
- Steel: compliant with (check one or more):
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  - API Spec. 5L
  - ASTM A53
  - ASTM A139

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  - FEP Fluorocarbon Tubing conforming to ASTM D3296

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to assure that your construction plans are in compliance with all existing regulations.

Solid Casing: (2 X H (Ground Elev. - Water Level Elev.))
- Material: Steel
- Material Standard: ASTM A-606, Type 4
- Length: 35 ft.
- Diameter: 4-1/2" I.D. in.
- Wall Thickness: 5/16 in.
- Bottom Elevation: -85 ft., mat.

Open Casing: (Check one)
- Material: None
- Material Standard: (Check one)
- Length: 
- Diameter: 
- Wall Thickness: 
- Opening: 
- Bottom Elevation: 

Open Hole:
- Length: 100 ft.
- Diameter: 11 in.
- Bottom Elevation: -185 ft., mat.

Bottom Elevation: 10 ft., mat. (approx.)

Minimum annular space between hole and casing ≥ 3"
PROPOSED KEALIA WELLS 1A & 2A
(Replacing Kealia Wells 1 & 2)