Well Location

State Well No.: 5751-02
Well Name: Cogen, Salt Water
The Orchid at Mauna Lani
at Kalawapuaa, South Kohala, Hawaii, Hawaii
Tax Map Key: 6-8-22: 8 (3rd Div)

Well No.: 5751-02
19° 51' 11" N
155° 51' 45" W
(NAD27)

Notes:
Elevations are referred to
Mean Sea Level (M.S.L.) from
previously established benchmarks
by the R.M. Towill Corporation.

Ryan M. Suzuki
Licensed Professional Land Surveyor
Certificate Number 10059

This map was prepared by me
or under my direct supervision.
<table>
<thead>
<tr>
<th>FROM: Ryan</th>
<th>DATE: 6/18/03</th>
<th>SUSPENSE DATE:</th>
</tr>
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<tbody>
<tr>
<td>TO: ANAKALEA, P.</td>
<td>INIT:</td>
<td>TO: LAU, E.</td>
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<tr>
<td>BAUER, G.</td>
<td></td>
<td>MATHIAS, T.</td>
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<td>CHING, F.</td>
<td></td>
<td>NAKAMA, L.</td>
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<tr>
<td>DANBARA, S.</td>
<td></td>
<td>NAKANO, D.</td>
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<td>FUJII, N.</td>
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<td>OHYE, M.</td>
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<td>GOODING, K.</td>
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<td>SAKODA, E.</td>
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<td>HARDY, R.</td>
<td>INIT:</td>
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<td>HIGA, D.</td>
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<td>SWANSON, S.</td>
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<td>ICE, C.</td>
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<td>UYENO, D.</td>
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<td>IMATA, R.</td>
<td></td>
<td>YODA, K.</td>
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<tr>
<td>KUNIMURA, I.</td>
<td></td>
<td>YOSHINAGA, M.</td>
</tr>
</tbody>
</table>

Please also fax copy to him or hardcopy to follow.
June 18, 2003

Mr. Craig Kellison
60 South Lassen Street
Susanville, CA 96130

Dear Mr. Kellison:

Violation and Fines for Turner Drilling

Thank you for your additional information pertaining to the installation of the pump for the Cogen Saltwater Well (Well No. 5751-02).

For your information, the submittal faxed to Turner Drilling on June 13, 2003 was not presented to the Commission.

With respect to outstanding issues that Turner Drilling has with the Commission, for the Letterman Well (Well No. 5711-01), the Commission:

B. Imposed a fine of $26,800 on Turner Drilling of which payment will consist of foregoing $10,800 owed by the applicant and a cash fine of $16,000 payable within 30 days.
C. Suspended any current, pending or future applications by Turner Drilling until the fines are paid and Turner Drilling completes the permit process for this well.
D. The driller is responsible for abandoning and sealing the well and the cost for same.

Order Turner Drilling to handle the details of abandoning and sealing Well No. 5711-01.

Please note that the cash fine is $16,000, not $10,800 which was stated in the June 18, 2003 submittal.

Therefore, the following items are currently outstanding:

A. Payment of the $16,000 cash fine
B. Sealing of the Letterman Well (5711-01)

Please provide a timeframe for which these issues will be complied with.

If you have any questions, please contact Ryan Imata of the Commission staff at (808) 587-0255.

Sincerely,

[Signature]

ERNEST Y.W. LAU
Deputy Director

c: Vince Kanemoto, State of Hawaii, Department of the Attorney General
April 22, 2003

TO: Holly McEldowney, Acting Administrator
Historic Preservation

FROM: Ernest Y.W. Lau, Deputy Director
Commission on Water Resource Management

SUBJECT: After-the-Fact Well Construction/Pump Installation Permit Application
Cogen Salt Water Well 1 (Well No. 5751-02)

Transmitted for your review and comment is a copy of the captioned After-the-Fact Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by May 23, 2003. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

RESPONSE:

[ ] No objections
[ ] Other objections:

[ ] There may be areas in the vicinity of the well site that contain subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal.

[ ] Other relevant Historic Preservation rules/regulations, information, or recommendations are attached.

Contact Person: ___________________________ Phone: ______________

Signed: ___________________________ Date: 5-30-03

[ ] Other comments:
Date: may 23, 2003

To: Commission on Water Resource Management
Department of Land & Natural Resources
State of Hawaii

Attn: Ryan Imata

From: Lori Kajiwara
Planning & Design Section
Ph 586-4290 direct line
Fax 586-4300
Email: Lkajiwara@eha.health.state.hi.us

Subject: Well Construction/Pump Installation Permit/Water Use Permit for
Well No. 5751-02 / 5751-04 / 3055-01
cogen salt water / cogen salt water / Kalukalu

Please find enclosed the application of the above subject project.

4959-02 Raptor Residence
1229-02 Pahala Deep Well

STATE MESSENGER DELIVERY

Sorry for the delay—our Kona engineer's contact person has been swamped with requests.
April 22, 2003

TO: Honorable Chiyome L. Fukino, M.D., Director
    Department of Health
    Attention: Harold Yee, Wastewater Branch
                William Wong, Safe Drinking Water Branch
                Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
                Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
      Commission on Water Resource Management

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Attachment(s)

RESPONSE:
[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 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.
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[ ] 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 [ ] is not located near the proposed well site (information attached).
[ ] An NPDES permit is required.
[ ] Other relevant DOH rules/regulations, information, or recommendations are attached.

X No comments/objections No records found
Contact Person: Lon N. Kajiwara Phone: 586-4294
Signed: Chiyome L. Fukino Date: 5-23-2003
April 22, 2003

TO: Honorable Chiyome L. Fukino, M.D., Director
    Department of Health
    Attention: Harold Yee, Wastewater Branch
    William Wong, Safe Drinking Water Branch
    Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
    Alec Wong, Clean Water Branch

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    Commission on Water Resource Management

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[ ] An NPDES permit is required.

[ ] Other relevant DOH rules/regulations, information, or recommendations are attached.

[ ] No comments/objections

Contact Person: Bill Wong
Phone: 586-4258
Signed: Bill Wong  Date: 4/28/03

Bill Wong
April 22, 2003

TO: Dede Mamiya, Administrator
Land Division

FROM: Ernest Y.W. Lau, Deputy Director
Commission on Water Resource Management

SUBJECT: After-the-Fact Well Construction/Pump Installation Permit Application
Cogen Salt Water Well 1 (Well No. 5751-02)

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Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

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. ____________________________.

[ ] This well project [ ] requires [ ] does not require a CDUP. If a CDUP is required it [ ] has [ ] has not been approved and [ ] is [ ] is not currently active.

[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments: Original source of private title is Land Commission Award No. 4452:3 issued between 1845 and 1855.

Contact Person: Gary Martin Phone: 587-0421

Signed: ____________________________ Date: ______________
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

1. (a) WELL OWNER: The Fairmont Orchid, Hawaii
Mailing Address: One North Kaniku Drive, Kohala Coast, Island of Hawaii 96743
Fax: (808) 887-2068
Phone: (808) 887-7408
E-mail: Raymond.Seaver@fairmont.com
Contra (.Person: Raymond Seaver

(b) LANDOWNER: The Fairmont Orchid, HI
Mailing Address: One North Kaniku Drive, Kohala Coast, Island of Hawaii 96743
Fax: (808) 887-2068
Phone: (808) 887-7408
E-mail: Raymond.Seaver@fairmont.com

(c) CONTRACTOR: Contact Person:
Mailing Address:
Fax:
Phone:
E-mail:

WELL & PUMP INFORMATION: (Please fill in the diagram on the back of this form.)

2. WELL NAME: Cogeneration Salt Water
Address The Fairmont Orchid, Hawaii
Tax Map Key: 6 8 22 08

3. PROPOSED WORK: (check all that apply)
   - Construct New Well
   - Install New Pump*
   - Modify Existing Well*
   - Modify Pump*
   - Abandon/Seal*

   *State Well No.: 5751-02
   (if unknown, please call Commission at 587-0225)

4. CONSTRUCTION:
   - Drilled
   - Dug
   - Shaft
   - Tunnel
   Is this well part of a battery of wells? Yes
   No (Please describe)

5. PROPOSED PUMPING RATE: 3600 gallons per minute

6. PROPOSED USE: (check all that apply)
   - Municipal (including hotels, stores, etc.)
   - Industrial
   - Domestic (individual, noncommercial water system)
   - Irrigation (crop)
   - No. of Acres:
   - Military
   - Other (explain): Cogen Salt Water

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 5 Million gallons per day
   (b) METHOD OF FLOW MEASUREMENT: Floometer

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.
   Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OECG at 586-4185
   Special Management Area Permit (SMAP) To determine if an SMAP is necessary: on Oahu, call 527-5374; on Hawaii, call 961-8288; for Maui county, call 270-7235; on Kauai, call 241-6677.

9. REMARKS, EXPLANATIONS: TURFED (PUMP) WAS DRILLED & INSTALLED. CANNOT LOCATE.

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories 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 60 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; 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $1000/day.

Well Owner (print legibly) The Fairmont Orchid, Hawaii
Signature
Date MAR 19, 03

Landowner (print legibly) The Fairmont Orchid, Hawaii
Signature
Date MAR 17, 03

Contractor (print legibly)
Signature
Date MAR 19, 03

For official use only
Latitude
Longitude
Aquifer System No.
State Well No.

For Official Use Only:
RECEIVED
03 MAR 19 10:13

CONSTRUCTION: It is necessary, call Regulation Branch at 887-0225.
For further information and updates to this application form, visit http://www.state.hi.us/wl/
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Elevation at top of casing: 14 ft., slm*

Ground Elevation: 12 ft., slm*

Minimum of 2’ Radius & 4” Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.)

Solid Casing: (≥ 90% x (Ground Elev.-Water Level Elev))
- Total Length: 60 ft.
- Nominal Diameter: 18 in.
- Wall Thickness: PVC SCHED 40 in.
- Bottom Elevation: __________ ft., slm*

Open Casing: □ Perforated □ Screen
- Total Length: N/A ft.
- Nominal Diameter: __________ in.
- Wall Thickness: __________ in.
- Bottom Elevation: __________ ft., slm*

Open Hole:
- Length: __________ ft.
- Diameter: 24 in.
- Bottom Elevation: __________ ft., slm*

* 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.

For non-salt water Basalt Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,
Bottom Elevation of Well Limit = (Water Elevation - 0.25 X Water Level Elev)

Example: Estimated = 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2 - 0.25 X 2) = -1.8 ft.

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F490: (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  □ Filament Wound Resin Pipe conforming to ASTM D2997
  □ 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
- Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
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  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

Additional

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to ensure that your as-built is in compliance with applicable standards.
July 23, 2003

Mr. Craig Kellison
60 South Lassen Street
Susanville, CA 96130

Dear Mr. Kellison:

**After-the-Fact Pump Installation for Cogen Salt Water Well (Well No. 5751-02)**

This letter is to confirm the phone call between yourself and Ryan Imata of Commission staff on July 14, 2003.

The Commission has determined that Big Island Mechanical installed the pump in the Cogen Salt Water Well (Well No. 5751-02). Therefore, we will not take Turner Drilling to the Commission for a violation for the installation of the pump without a permit.

If you have any questions, please contact Ryan Imata of the Commission staff at (808) 587-0255.

Sincerely,

[Signature]

ERNEST Y.W. LAU
Deputy Director

RI:ss
April 22, 2003

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Harold Yee, Wastewater Branch
William Wong, Safe Drinking Water Branch
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: After-the-Fact Well Construction/Pump Installation Permit Application

Transmitted for your review and comment is a copy of the captioned After-the-Fact Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by May 23, 2003. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 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, §11-10-20.

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For the applicant's information, a source of possible wastewater contamination is not located near the proposed well site (information attached).

An NPDES permit is required.

Other relevant DOH rules/regulations, information, or recommendations are attached.

Contact Person: Dr. Keith Kawaoka
Phone: 586-4249
Signed: Kawaoka
Date: 4/22/03
Fax to: Commission on Water Resources Mgt. 587-0219
April 22, 2003

Mr. Raymond Seaver
The Fairmont Orchid, Hawaii
One North Kaniku Drive
Kohala Coast, HI 96743

Dear Mr. Seaver:

After-the-Fact Well Construction/Pump Installation Permit Application for Well No. 5751-02

We acknowledge receipt, on March 19, 2003, of your completed After-the-Fact Well Construction/Pump Installation permit application and filing fee for the Cogen Salt Water Well 1 (Well No. 5751-02). 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 Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), 274-3141 (Kauai), 984-2400 (Maui), or 1-800-468-4644 (Lanai & Molokai), extension 70255.

Sincerely,

ERNEST Y.W. LAU
Deputy Director

RI:ss

c: RJR Services
April 22, 2003

TO: Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
   Attention: Harold Yee, Wastewater Branch
   William Wong, Safe Drinking Water Branch
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[ ] No comments/objections

Contact Person: ___________________________ Phone: ___________________________

Signed: ________________________________ Date: ____________________________
TO: Dede Mamiya, Administrator  
   Land Division  
FROM: Ernest Y.W. Lau, Deputy Director  
   Commission on Water Resource Management  
SUBJECT: After-the-Fact Well Construction/Pump Installation Permit Application  
   Cogen Salt Water Well 1 (Well No. 5751-02)

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RI:ss  
Attachment(s)

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[ ] A water lease/permit is not required of this applicant.

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[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________ Phone: ____________

Signed: ____________________________ Date: ____________
TO: Holly McEldowney, Acting Administrator Historic Preservation
FROM: Ernest Y.W. Lau, Deputy Director Commission on Water Resource Management
SUBJECT: After-the-Fact Well Construction/Pump Installation Permit Application
Cogen Salt Water Well 1 (Well No. 5751-02)

April 22, 2003

Transmitted for your review and comment is a copy of the captioned After-the-Fact Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by May 23, 2003. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

RESPONSE:

[ ] There may be areas in the vicinity of the well site that contain subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal.

[ ] Other relevant Historic Preservation rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

Contact Person: ___________________________ Phone: ____________

Signed: ___________________________ Date: ____________

Attachment(s)
<table>
<thead>
<tr>
<th>DOCUMENT NO.</th>
<th>UAC</th>
<th>ATTACHED WORKSHEET</th>
<th>DATE: 4/22/03</th>
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<tbody>
<tr>
<td>F YR APP D</td>
<td>SRC/ COST OBJ CTR PROJECT PH ACT</td>
<td>AMOUNT</td>
<td>NAME/DESCRIPTION (w/ INPUT)</td>
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<tr>
<td>03 326 C</td>
<td>026 0752</td>
<td>(1) 25.00</td>
<td>Huna Kai Plantation, LLC</td>
</tr>
<tr>
<td>03 326 C</td>
<td>026 0752</td>
<td>(2) 25.00</td>
<td>R.JR SRRVICES</td>
</tr>
<tr>
<td>03 326 C</td>
<td>026 0752</td>
<td>(3) 25.00</td>
<td>AMERADA HESS COMPANIES</td>
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<td>03 326 C</td>
<td>026 0752</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>75.00</td>
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</table>

REMARKS: LINE (1) Well No. 1326-03
LINE (2) Well NO. 5751-04
LINE (3) Well No. 5751-02
LINE (4) |

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Amerada Hess Companies
Attn: Internal Audit
One Hess Plaza
Woodbridge, NJ 07095

STATE OF HAWAII
DEPT. OF LAND & NATURAL RESOURCES
P. O. BOX 821
HONOLULU

HI 96809

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<table>
<thead>
<tr>
<th>VENDOR</th>
<th>DATE</th>
<th>CHECK NO.</th>
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DIV/LOC | INVOICE NO. | DATE | P.O. NO. | GROSS AMOUNT | DISCOUNT AMOUNT | NET AMOUNT |
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<td>3/14/03</td>
<td>03/14/2003</td>
<td>25.00</td>
<td>0.00</td>
<td>25.00</td>
<td></td>
</tr>
</tbody>
</table>
March 20, 2003

Mr. Ryan Imata  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

RE: State Well # 5751-02 Cogen Salt Water

Ryan:

As per our phone conversation yesterday regarding well # 5751-02 Orchid Co-gen salt water well, I have attached the details to the best of my knowledge (see enclosed reports and photos). I have inspected the site and spoken with the new owners/operators of the well. The hotel changed hands in Dec. 02. They have made major capital expenditures on this project and have expectations which will provide incentives for energy saving technology that others will follow.

The Fairmont Orchid should not be held accountable for the paperwork deficiencies of the well driller Frank Turner. He has left the island under unfavorable circumstances as you are well aware. My understanding is that the well was tested in late December for an 8 hour period at 3,500 GPM. However, there is no draw down data available. The water temperature never varied from 78 degrees F. This is a viable Co-gen source with no effect on ground water.

Please accept these reports as after the fact and in good faith:
Well Completion Part I - Well drilling  
Well Completion Part II - Pump Installation

I have also enclosed the application for the back up well. If you have any questions, or need further information, please call me.

I look forward to working with you on the back up well application and completion of the reports for the existing well.

Yours truly,

Bob Richardson  
RJR Services

cc: Fairmont Orchid
1. State Well No.: 5751-02  Well Name: COGEN SALT WATER  Island: HAWAII

2. Address: ORCHID AT MAUNA LANI  Tax Map Key: 6-8-22:08

3. Pump Installation Company: unknown

4. Date Pump Installed: unknown

5. PERMANENT PUMP INFORMATION

   S/N 596387A
   Pump Type, Make, Serial No.: Line shaft - Peerless  Rated Capacity: 3,500 gpm
   Motor Type, H.P., Voltage, rpm: Surface, 125, 480 volt, 1750 RPM
   Type of flow meter: Strap On  which measures in G.P.M.

6. Method of flow measurement:
   ☑ Flowmeter  Manufacturer unknown  Make ____________  Size ____________
   ☐ Weir*  ☐ Open Pipe*  ☐ Orifice*  ☐ Other*, explain below
   *attach schematic

7. Fill in the as-built section on the other side of this sheet.

Other remarks/comments:

________________________________________________________
________________________________________________________
________________________________________________________
________________________________________________________
________________________________________________________

AFTER THE FACT, TO THE BEST OF MY KNOWLEDGE
Pump Installation Contractor (print) ROBERT J. RICHARDSON C-57/C-57a/A Lic. No. C 17301
Signature  Date  3/29/03

Permittee (print) ENR (HI) HOTEL HOLDINGS LLC ON A THE FAIRMONT ORCHID HAWAII
Signature  Date  2/6 Mar 03

J. D. Walshley  Regional Controller, Hawaii
Bench mark elevation surveyed to nearest 0.01 ft. = 10.19 ft. mean sea level

NONE

elevation of top of chase tube

Pump intake depth = 63.59 ft.
(referenced to bench mark)

NONE

Chase tube depth = _____ ft.
(referenced to bench mark)

WAIVED PERMIT

NONE
if airline installed, bottom of airline elevation = _____ ft. mean sea level
<table>
<thead>
<tr>
<th>1. State Well No.: 5751-02</th>
<th>Well Name: Cogen Salt Water</th>
<th>Island: Hawaii</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address: Orchid at Mauna Lani</td>
<td>Tax Map Key: 6-8-22:08</td>
<td></td>
</tr>
<tr>
<td>3. Drilling Company: Turner Drilling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Drilling method used during construction:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☑ Rotary</td>
<td>☐ Percussion</td>
<td>☐ Other (describe):</td>
</tr>
<tr>
<td>5. Date Well Construction (drilled, cased, grouted) completed:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☑ Prior to 12/1/00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Was the subject well cored?</td>
<td>☑ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>7. Initial water-level encountered 10 ft. below ground</td>
<td>Date and time of measurement: unknown</td>
<td>WAIVED PER PERMIT</td>
</tr>
<tr>
<td>8. Step-Drawdown Test completed?</td>
<td>☐ No</td>
<td>☟ Yes</td>
</tr>
<tr>
<td>9. Constant Rate Aquifer Test completed?</td>
<td>☐ No</td>
<td>☟ Yes</td>
</tr>
<tr>
<td>10. Water-level: 0 + tide ft. above msl</td>
<td>Date and time of measurement:</td>
<td></td>
</tr>
<tr>
<td>11. Chloride: Sea Water ppm</td>
<td>Date and time of sampling:</td>
<td></td>
</tr>
<tr>
<td>12. Temperature: 78 °F</td>
<td>Date and time of measurement:</td>
<td></td>
</tr>
</tbody>
</table>

13. Fill in the as-built section on the other side of this sheet.

14. Fill in attached surveyor's 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. The proposed manufacturer's rated pump capacity is 3,500 gpm at a head of 10 ft.

17. Remarks: 

---

**AFTER THE FACT, TO THE BEST OF MY KNOWLEDGE**

**Licensed Driller (print)** ROBERT J. RICHARDSON

C-57 Lic. No. C-17301

Signature [Signature]

Date 3/29/03

**Permittee (print)** [Permittee Name]

[Permittee Signature]

Date 3/29/03

**Regional Controller, Hawaii**

[Controller Signature]

Date 3/29/03
SEE AS BUILT

13. AS-BUILT WELL SECTION (Please attach as-built if different from diagram provided below)

Elevation at top of casing _____ ft., msl
(to nearest 0.01 ft.)

Hole Diameter: 24 in.

Minimum of 2' Radius & 4' Thick Concrete Pad

Ground Elevation: 10.19 ft., msl Surveyed

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to ensure that your as-built is in compliance with applicable standards.

Solid Casing: (≥ 90% x (Ground Elev.-Water Level Elev))

<table>
<thead>
<tr>
<th>Length</th>
<th>Nominal Diameter</th>
<th>Wall Thickness</th>
<th>Bottom Elevation</th>
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</thead>
<tbody>
<tr>
<td>70'</td>
<td>18 in.</td>
<td>37.5 in.</td>
<td>-58.81 ft., msl</td>
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</table>

Open Casing: □ Perforated □ Screen

<table>
<thead>
<tr>
<th>Length</th>
<th>Nominal Diameter</th>
<th>Wall Thickness</th>
<th>Bottom Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>N/A</td>
<td>N/A</td>
<td>-68.81 ft., msl</td>
</tr>
</tbody>
</table>

Open Hole: 10'

<table>
<thead>
<tr>
<th>Length</th>
<th>Diameter</th>
<th>Bottom Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>15½&quot;</td>
<td>-68.81 ft., msl</td>
</tr>
</tbody>
</table>

*msl = mean sea level

H-5751-02 Cogen Salt 1

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

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 120

Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
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WCR1 Form 9/12/01 Page 2 of 4
WELL & PUMP INFORMATION: (Please fill in the diagram on the back of this form.)

1. XX WELL OWNER: The Fairmont Orchid, Hawaii
   Contact Person: Raymond Seaver
   Phone: (808) 887-7408
   Mailing Address: One North Kaniku Drive, Kohala Coast, Island of Hawaii 96743
   Fax: (808) 885-2068
   E-mail: Raymond.Seaver@fairmont.com

2. WELL NAME: Cogeneration Salt Water
   Island: Hawaii

   Address: The Fairmont Orchid, Hawaii

   Tax Map Key: Zone 6 Sec 8 Plat 22 Parcel 08

   Attach: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad map
   (b) a property tax map, showing well location referenced to established property boundaries

3. PROPOSED WORK: (check all that apply)
   - Construct New Well
   - Install New Pump*
   - Modify Existing Well*
   - Abandon/Seal*

   State Well No.: 5751-02

4. CONSTRUCTION:
   - Drilled
   - Dug
   - Shaft
   - Tunnel

   Is this well part of a battery of wells? Yes No (Please describe)

5. PROPOSED PUMPING RATE: 3600 gallons per minute

6. PROPOSED USE: (check all that apply)
   - Municipal (including hotels, stores, etc.)
   - Domestic (individual, noncommercial water system)
   - Irrigation (crop)
   - Military

   Does this well serve 25 or more people at least 90 days per year or have 15 or more service connections? Yes No (Please describe)

   Other (explain): Cogeneration Salt Water

   No. of Acres:

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 5 Million gallons per day

   (b) METHOD OF FLOW MEASUREMENT:
   - Flowmeter
   - Open-pipe
   - Weir
   - Orifice
   - Other (explain): Cogeneration Salt Water

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.

   Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   - Required
   - Not Required

   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OECG at 586-4185
   - Required
   - Not Required

   Special Management Area Permit (SMAP) To determine if an SMAP is necessary: on Oahu, call 527-5374; on Hawaii, call 961-8258; for Maui county, call 270-7235; on Kauai, call 241-6677.
   - Required
   - Not Required

9. REMARKS, EXPLANATIONS:

   "The Fairmont Orchid" was drilled andInstaller CANNOT LOCATE (circle one: C-57, C-57a, or A)

   (If more space is needed, please attach additional sheet)

   Note: Signing below indicates the signatories understand and swear that the information provided on this application is accurate except to the best of their knowledge. Further, the signatories 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 60 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; 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $1000/day.

   Well Owner
   (print legibly) The Fairmont Orchid, Landowner The Fairmont Orchid, Contractor
   Signature David Roberts Signature David Roberts
   Date 8/17/03 Date 8/17/03

   For official use only
   Aquifer System No.
   State Well No.

   WCP/IPA Form 8/21/01
10. PROPOSED WELL SECTION

(Please attach schematic if different from diagram provided below)

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 = (Water Elevation - 4 x Water Level Elev.) / 4

Example: Estimated + 2 ft. Water Level Elev. — Bottom Elevation of Well Limit = (2 + 4 x 18) / 4 = 16.5 ft.

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

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* 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.

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 = (Water Elevation - 4 x Water Level Elev.) / 4

Example: Estimated + 2 ft. Water Level Elev. — Bottom Elevation of Well Limit = (2 + 4 x 18) / 4 = 16.5 ft.

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□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296
March 3, 2003

Mr. David Monahan
Colony Capital
The Orchid at Maunalani
1 North Kaniku Drive
Kamuela, HI 96727

Dear Mr. Monahan:

Cancellation of Well Construction Permit for Well No. 5751-02

We have not yet received a Well Completion Report for the Cogen Saltwater Well (Well No. 5751-02). Because your permit expired on January 19, 2003 and we have not yet received any information or completion reports included in your permit package regarding the construction of your well, we are notifying you that your permit is cancelled as of January 19, 2003. If for some reason the work was completed, please explain what work has been done, and complete the applicable forms.

If you have any questions, please contact Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), extension 70255.

Sincerely,

DEAN A. NAKANO
Acting Deputy Director

RI:ss
MR. RYAN IMATA  
COMMISSION ON WATER RESOURCE MANAGEMENT  
P.O. Box 621  
Honolulu, Hawaii 96809
August 14, 2001

Mr. Frank Turner  
Turner Drilling  
P.O. Box 6941  
Hilo, HI 96720

Dear Mr. Turner:

Well Construction Permit for Well No. 5751-02

We have received your signed Well Construction Permit for the Cogen Salt Water Well (Well No. 5751-02). However, below the signature line, the permit states “Please sign both copies of the permit, return one to the Chairperson, and retain the other for your records”. Therefore, we are returning one copy of your signed permit for your use. We remind you that you need a copy of the permit in order to understand what the standard conditions of the permit are.

Thank you for giving us the start date of the construction.

If you have any questions, please contact Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), 274-3141 (Kauai), 984-2400 (Maui), or 1-800-468-4644 (Lanai & Molokai).

Sincerely,

LINNEL T. NISHIOKA  
Deputy Director

RI:ky
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 Cogen Salt Water (Well No. 5751-02) at The Orchid at Maunalani, Hawaii, TMK 6-8-22:08, 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 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 x 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. Plot 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: January 19, 2001
Expiration Date: January 19, 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 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: [Signature]
Printed Name: David J. Magalan
Firm or Title: H.R. McDouglas

Driller's Signature: [Signature]
Printed Name: Frank Turner
Firm or Title: Owner
C-57 License #: 22597, Date: 8-6-01

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachment
USGS
Department of Health/ Safe Drinking Water, Wastewater, and Clean Water Branches
Hawaii Department of Water Supply
Dan Lum, Water Resource Associates, 1185 Bishop St., Ste. 1708, Honolulu, HI 96813-3307
Hi Ryan:

We are officially giving you our 2 week notice to commence drilling for the Cogen Salt Water Well #5751-02

If you have any questions, please call me.

Thanks!
Hi Ryan:

We are officially giving you our 2 week notice to commence drilling for the Cogen Salt Water Well #5751-02

If you have any questions, please call me.

Thanks!
Mr. David Monahan
Colony Capital
The Orchid at Maunalani
1 North Kaniku Drive
Kamuela, HI 96727

Dear Mr. Monahan:

Well Construction Permit
Cogen Salt Water (Well No. 5751-02)

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. Standard Condition 2 is modified to exempt the permittee from the requirements to install a 1 1/4-inch diameter monitor tube and to conduct pumping tests.

2. Standard Conditions 7.b. and 7.e. are waived.

Please sign and have the contractor sign both permit originals and return one for our files.

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 Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000, extension 70255.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures
c. Dan Lum, Water Resource Associates
WELL CONSTRUCTION PERMIT
Cogen Salt Water, Well No. 5751-02

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 Cogen Salt Water (Well No. 5751-02) at The Orchid at Mualalani, Hawaii, TMK 6-5-22:08, 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 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 1½-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. Plot 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.

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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 agreement 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: January 19, 2001
Expiration Date: January 19, 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 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.
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**REMARKS:**

- **LINE (1):** WCP Appl. for Cogen Salt Water (Well No. 5751-02)
- **LINE (2):** WCP Appl. for Paehau 1 (Well No. 4124-01)
- **LINE (3):** WC/PIP Appl. for Koali-Sullivan (Well No. 4100-01)
- **LINE (4):** WC/PIP Appl. for Hoolawa-Cookman (Well No. 5514-04)
January 17, 2001

Ms. Linnel T. Nishioka
Deputy Director
State Commission on Water Resource Management
Dept. of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Nishioka:

Application for Well Permit
Orchard Cogen Salt Water Well, South Kohala, Hawaii
TMK: 6-8-22:08

Enclosed are three copies of an application for a Well Construction and Pump Installation Permit for the proposed Orchid Cogen Salt Water Well, together with copies of a topographic map and property tax map.

Also enclosed is a check for $25.00.

We would appreciate your earliest acceptance and approval. Please call us if you have any questions.

Sincerely,

DAN LUM

Encls.
c: Joseph Petrie w/ encl.
   David Monahan w/o encl.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

1. (a) WELL OWNER: Colony Capital Contact Person: DAVID MENDOZA Phone: 808-887-7152
Mailing Address: The Orchid at Maunaloa, 1 North Kamuku Dr., Kaimuki, HI 96727
Fax: 808-887-5304
(b) LAND OWNER: Colony Capital Contact Person: DAVID MENDOZA Phone: 808-887-7152
Mailing Address: Same as Well Owner Fax: Colony Capital
(c) CONTRACTOR: NOT AVAILABLE Contact Person: Phone:
Mailing Address: Colony Capital Fax: Colony Capital

WELL & PUMP INFORMATION: (Please fill in the diagram on the back of this form.)

2. WELL NAME: COLONY SALT WATER Address: THE ORCHID AT MAUNALOAL Tax Map Key: Zone Plat
Island: HAWAII Sec Plat
Attach the relevant portion of (a) a 7.5‐Minute Series USGS topographic map (scale 1:24,000) and include the name of the quad map, and (b) a property tax map, showing well location referenced to established property boundaries.

3. PROPOSED WORK: (check all that apply)
   X Construct New Well
   X Install New Pump*
   X Modify Existing Well
   X Modify Pump*
   X Abandon/Seal*
   *State Well No. ___________________________ (if unknown, please call Commission at 587-0225)

4. CONSTRUCTION: X Dug ☐ Shaft ☐ Tunnel
Is this well part of a battery of wells? ☐ Yes ☐ No (Please describe)

5. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 3500 gallons per minute
   Pump Type (Check one):
   ☐ Deep Well Turbine ☐ Rotary-Displacement ☐ Impulse
   ☐ Submersible ☐ Rotary-Gear ☐ Propeller
   ☐ Centrifugal ☐ Centrifugal
   ☐ Reciprocating

6. PROPOSED USE: (check all that apply)
   ☐ Industrial (COOLING)
   ☐ Municipal (including hotels, stores, etc.) ☐ No. of Dwelling Units: NOT APPL.
   ☐ Domestic (individual, noncommercial water system) ☐ No. of Acres: NOT APPL.
   ☐ Irrigation (crop) ☐ Other (explain):
   ☐ Military

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 5 MILLION gallons per day
   (b) METHOD OF FLOW MEASUREMENT: ☐ Flowmeter ☐ Open-pipe ☐ Weir ☐ Orifice ☐ Other (explain)

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS: ☐ CDUP ☐ SMAP ☐ EIS ☐ EA ☒ None ☐ Other (explain)

9. REMARKS, EXPLANATIONS:

(IIf more space is needed, please attach additional sheet)

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 60 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.

Owner: COLONY CAPITAL Landowner: COLONY CAPITAL Contractor: COLONY CAPITAL
Signature ___________________________ Signature ___________________________ Signature ___________________________
Date ___________ Date ___________ Date ___________

For official use only
Latitude: ___________________________ Aquifer System No.: 80501
Longitude: ___________________________ State Well No.: 5751-02

WCPIPA Form 7/13/00
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Hole Diameter: \(24\) in.

Elevation at top of casing: \(14\) ft., msl*

Minimum of 2' Radius & 4' Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.)

Ground Elevation: \(12\) ft., msl*

Cement Grout: \(102\) ft.

(min. 70% of distance from ground elevation to top of water surface or 500 ft., whichever is less.)

Annular space between hole and casing (min.3'):

Rock or Gravel Packing:

Crushed Basalt

Rounded Gravel

Estimated Water Level Elevation: \(10\) ft., msl*

Solid Casing: \(\geq 90\% \times (\text{Ground Elev.} - \text{Water Level Elev.})\)

Total Length: \(100\) ft.

Nominal Diameter: \(10\) in.

Wall Thickness: \(SCH 40\) in.

Bottom Elevation: \(-88\) ft., msl*

Open Casing: Q Perforated Q Screen

Total Length: \(0\) ft.

Nominal Diameter: \(0\) in.

Wall Thickness: \(0\) in.

Bottom Elevation: \(-198\) ft., msl*

Open Hole:

Length: \(110\) ft.

Diameter: \(14\) in.

Bottom Elevation: \(-198\) ft., msl*

* 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.

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 = \(\text{Water Elevation} - \frac{41.x \times \text{Water Level Elev}}{4}\)

Example: Estimated = 2 ft. Water Level Elev. --- Bottom Elevation of Well Limit = \(2 - \frac{41.5 \times 2}{4}\) = \(-18.5\) ft.

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 A422 Type E Type S Grade B Other
- Stainless Steel: (check one):
- ASTM A409 (production wells)
- ASTM A312 (monitor wells)
- PVC Plastic conforming to ASTM F490 and ASTM D1577: (check one):
- Schedule 40
- Schedule 80
- Thermoset Plastic: (check one):
- 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 D3226
- 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 A422 Type E Type S Grade B Other
- Stainless Steel: (check one):
- ASTM A409 (production wells)
- ASTM A312 (monitor wells)
- PVC Plastic conforming to ASTM F490 and ASTM D1577: (check one):
- Schedule 40
- Schedule 80
- Thermoset Plastic: (check one):
- 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 D3226
- FEP Fluorocarbon Tubing conforming to ASTM D3296
ORCHID COGEN WELL
TMK: 6-8-22:08
South Kohala, Hawaii

Proposed Section

14 ft., msl (Approx.)
Concrete Pad
Ground Elev.: 12 ft., msl (Approx.)

1:1 Sand-Cement Grout

18" PVC Solid Well Casing
ASTM F480, Sched. 40

Drill Hole, 24" dia.

Open Hole, 17" dia.

NOT TO SCALE

Water Resource Associates
132/proposed
1/16/01