# Fine Calculation

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Finding of violation (min $250)</th>
<th>Occurring in WMA (min $250)</th>
<th>Repeat violation (min $250)</th>
<th>Gravity component</th>
<th>Mitigative component</th>
<th>TOTAL DAILY FINES</th>
<th>Start date</th>
<th>End date</th>
<th>No. of days</th>
<th>Compliance within 30 days (yes/no)</th>
<th>Total duration of violation</th>
<th>Alternate settlement</th>
<th>Subtotal fine for one incident</th>
<th>No. of Incidents</th>
<th>Subtotal fines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No Pump Installation 1 Permit issued</td>
<td>$250</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$-125</td>
<td>$125</td>
<td>6/15/2000</td>
<td>12/1/2000</td>
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<td>no</td>
<td>144</td>
<td></td>
<td>$18,000</td>
<td>1</td>
<td>$18,000</td>
</tr>
</tbody>
</table>

## Notes

**Item No.**
- Description - description of the violation, see submittal text for specific rules violated
- Finding of violation (min. $250) - where there is a violation, there is a minimum daily fine of $250
- Occurring in WMA (min. $250) - When the violation is in a designated Water Management Area, there is a minimum additional daily fine of $250
- Repeat violation (min. $250) - When the violator has committed violations in the past, there is a minimum additional daily fine of $250
- Gravity component - allows for the increase of the daily fine.
- Mitigative component - allows for the decrease of the daily fine.
- TOTAL DAILY FINES - the sum of the values in columns C through G.
- Start date - the date where calculation of daily fines begins (date of notice of violation, or permit approval, or permit fully signed, or violation occurred, or CWRM order).
- End date - the date of the end of the violation or latest CWRM meeting or completed permit application.
- No. of days - calculated between start and end dates.
- Compliance within 30 days (yes/no) - if the applicant complies with the Commission staff's notice of violation requirements within 30 days.
- Total duration of violation - if there was compliance with staff notice of violation within 30 days, the duration shall be one (1) day. If there was no compliance with staff notice of violation within 30 days, the duration shall be the total days of the violation.
- Alternate settlement (yes/no) - an alternate settlement in lieu of the daily fine was recommended.
- Subtotal fine for one incident - per incident fine.
- No. of incidents - of violation that occurred for this investigation.
- Subtotal fines - the subtotal of fines, calculated by multiplying (per incident fine) * (no. of incidents).

## Exhibit 5: Fine Schedule
We contacted Jody Allione who recalled receiving a partially completed application or an unsigned permit from the Water Commission and forwarding it on to Enserch's Houston office for appropriate signature. Like the Water Commission, we have been unable to locate copies of either this application or an unsigned permit.

**We Began the Application Process As Soon As We Realized We Did Not Have a Permit**

By approximately October 4, 2000, we had come to suspect from our review of the records available to us that a pump installation permit application should be resubmitted. We then worked diligently with the project general contractor, the pump installation contractor for Well No. 1 and the consultant for Well No. 2 to complete and submit an after-the-fact pump installation permit application for Well No. 1. The completed application was submitted to the Water Commission on October 25th.

I hope this will assist you and your staff in making your recommendation to the Commissioners. Please contact me if you would like me to provide any further clarification or my correspondence supporting this letter. We truly appreciate your cooperation and assistance in this matter.

Respectfully,

Jean K. Campbell

cc: Tom Nance, Tom Nance Water Resource Engineering  
William Moore, Roscoe Moss/Beylik Drilling, Inc.  
Larry Kafchinsky, Hamakua Energy Partners, LP
I did not receive an immediate response from the Water Commission but John Pierce informed me that, while he did not have a copy of the permit, he had spoken to Ryan Yamada (presumably Ryan Imata) at the Water Commission, who had informed him that the pump installation permit was granted in March of 1999. Mr. Pierce returned a list of due diligence documents to me on or about September 12, 2000 indicating the same.

As of Late September, We Were Still Led to Believe That An Application Had Been Submitted

On or about September 19, 2000, I spoke with Roy Hardy of the Water Commission about the pump installation permit and was told that the permit was issued to Enserch on March 29, 1999, but that it was never returned signed by Enserch. He indicated that he would email me a copy of the permit that was final except for the deputy’s and Enserch’s signatures. Three days later on or about September 22, 2000, Ryan Imata called me saying that he then believed that the March 29, 2000 date in their data base was a mistake and that no pump installation permit was ever issued. If it had been, it would have gone to Jody Allione at the Enserch office in California. He also indicated that the last action on the permit application was a request to the owner for survey elevation data sometime roughly around March 1999. His records indicated that they had gotten no response so no permit was ever issued.

During the time period from the summer of 1999 until the end of that year, a transfer of partnership interests took place at Encogen Hawaii L.P. The original Encogen, the entity which would have submitted a pump installation permit application, was made up of Jones Hamakua Inc. and Enserch Development as partners. During the summer of 1999, Enserch began the process of transferring its partnership interest to TECO, the new partner, a process which legally occurred in November but took several months to actually complete. The Partnership was renamed Hamakua Energy Partners L.P. During the transfer process, Enserch produced voluminous documents covering many facets of project ownership and operation for Jones. Because Enserch had been the managing partner of Encogen, in control of the development of the project, including the permitting, any documents relating to the pump installation permit application sent by the Water Commission to it would have been transferred to Jones in the more than 35 boxes of documents turned over. Jones became the managing partner of the new Hamakua Energy Partners L.P. with TECO taking over much of the environmental permitting.
August 2, 2001

BY FAX AND U.S. MAIL

Linnel T. Nishioka
Deputy Director
Commission on Water Resource
Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Enserch Well No. 1, State No. 6528-02: Pump Installation Permit Application

Dear Linnel:

Pursuant to your request made at our meeting on July 26, 2001, I am writing to describe the events and circumstances surrounding the pump installation permit application for Enserch Well No. 1, State No. 6528-02.

We began searching for the pump installation permit in early September 2000 as part of a due diligence effort in preparation for the refinancing of the project. Unable to locate either a permit or application in the files available to me, on or about September 11, 2000, I called both the project general contractor (John Pierce at Jones/Burns & McDonnell Hamakua Joint Venture) and the Water Commission to request copies of their files.

Initially, We Believed a Permit Had Been Issued
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
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<tbody>
<tr>
<td>12/26/96</td>
<td>In file Well Construction Permit application received</td>
</tr>
<tr>
<td>2/20/97</td>
<td>In file Additional info sent in by Waimea Water Services</td>
</tr>
<tr>
<td>3/4/97</td>
<td>In file Well Construction Permit issued</td>
</tr>
<tr>
<td>7/28/97</td>
<td>In file Applicant requests extension to start date</td>
</tr>
<tr>
<td>8/14/97</td>
<td>In file CWRM extends start date to 5/1/98, but completion 3/4/99 same</td>
</tr>
<tr>
<td>4/23/98</td>
<td>In file Applicant requests extension to start date</td>
</tr>
<tr>
<td>6/19/98</td>
<td>In file CWRM extends start date to 11/1/98, but completion 3/4/99 same</td>
</tr>
<tr>
<td>12/30/98</td>
<td>In file Applicant sends in signed permit (Jody Allione/Dale Stromquist)</td>
</tr>
<tr>
<td>2/3/99</td>
<td>In file CWRM sends letter to Encogen Hawaii stating we need elev survey</td>
</tr>
<tr>
<td>3/29/99</td>
<td>In file Applicant sends in revised Well Completion Report Part I</td>
</tr>
<tr>
<td>6/1/99</td>
<td>Approx Project transferral begins from Encogen Hawaii to Hamakua Energy Partners</td>
</tr>
<tr>
<td>12/1/99</td>
<td>Project transferred from Encogen Hawaii to Hamakua Energy Partners</td>
</tr>
<tr>
<td>12/30/99</td>
<td>In file Well Construction and Pump Installation Permit application received</td>
</tr>
<tr>
<td>1/19/00</td>
<td>In file WC and PI Permit application acknowledged as complete by CWRM</td>
</tr>
<tr>
<td>3/7/00</td>
<td>In file Well Construction Permit issued</td>
</tr>
<tr>
<td>6/15/00</td>
<td>In file Pump installed</td>
</tr>
<tr>
<td>6/21/00</td>
<td>In file Well Construction Permit signed and returned to CWRM</td>
</tr>
<tr>
<td>9/12/00</td>
<td>Notes J. Campbell receives due diligence docs indicating application made for PIP</td>
</tr>
<tr>
<td>9/19/00</td>
<td>Notes CWRM tells Jean Campbell PIP issued (from database) - no hard copy found</td>
</tr>
<tr>
<td>9/22/00</td>
<td>Notes Staff informs applicant that PIP not issued, and they should apply for ATF PIP</td>
</tr>
<tr>
<td>10/25/00</td>
<td>In file Tom Nance sends application in to CWRM for ATF Pump Installation</td>
</tr>
<tr>
<td>11/16/00</td>
<td>In file Staff sends out letter to applicant pointing out deficiencies in ATF PIP</td>
</tr>
<tr>
<td>12/1/00</td>
<td>In file WCR II submitted; ATF PIP application is acknowledged as complete</td>
</tr>
<tr>
<td>12/11/00</td>
<td>In file Test pump pulled</td>
</tr>
<tr>
<td>12/20/00</td>
<td>In file Permanent pump installed</td>
</tr>
<tr>
<td>1/10/01</td>
<td>In file Well Completion Report I and II sent in</td>
</tr>
<tr>
<td>1/10/01</td>
<td>In file Applicant sends in PIP application (not after the fact)</td>
</tr>
<tr>
<td>1/16/01</td>
<td>In file Staff sends out letter regarding acknowledgement of ATF PIP</td>
</tr>
<tr>
<td>3/5/01</td>
<td>In file Response sent to applicant re: PIP violation</td>
</tr>
<tr>
<td>8/15/01</td>
<td>Commission Action</td>
</tr>
</tbody>
</table>

**EXHIBIT 3: Timeline**
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

File: 6528-02 ENSERCH WEL #1

- Bench mark elevation surveyed to nearest 0.01 ft. = 445.56 ft. mean sea level

- Identify reference point elevation for water level measurements through chase tube

- Chase tube depth = 460 ft. (referenced to bench mark)

- Pump intake depth = 464' - 3" ft. (referenced to bench mark)

- If airline installed, bottom of airline elevation = _____ ft. mean sea level

- Top of Concrete Block
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 521, 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/cwrr.

1. State Well No.: 6528-02 Well Name: Enserch #1 Well Island: Hawaii
2. Address: 45-300 Lehua St., Honokaa, HI 96727 Tax Map Key: 45-002:056
4. Date Pump Installed: June 15, 2000

5. PERMANENT PUMP INFORMATION
   - Pump Type, Make, Serial No.: Submersible/Gould/PO 14310 Rated Capacity: 700 gpm
   - Motor Type, H.P., Voltage, rpm: Franklin - 125 - 3540
   - Type of flow meter: Propeller which measures in GPM

6. Method of flow measurement:
   - Water
   - Flowmeter Manufacturer Specialties: Make Saddle Size 10"
   - □ 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 (print) Beylik Drilling, Inc. C-57/C-57a/A Lic. No. AC-22214

Signature William C. Moore Date November 22, 2000
Permittee (print) Larry F. Kuzniewski Date 11/27/00

EXHIBIT 2
EXHIBIT 1: Location Map
labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water.

D. Suspend any current, pending or future applications by both the applicant and the driller until the fines are paid and the applicant/driller completes the permit process for this well.

Respectfully submitted,

LINNEL T. NISHIOKA
Deputy Director

Exhibit(s):

1. (Location Map)
2. (Well Completion Report)
3. (Timeline)
4. (Applicant letter dated August 2, 2001)
5. (Fine Schedule)
6. (Standard Pump Installation Permit Conditions)
7. (Pump Test Procedures)
8. (Water Use Report Form)
9. (Well Construction Permit and cover letter)
permits through the Commission, and both are very familiar with the Commission permitting requirements and should have known that a permit was required, and what was required for a completed after-the-fact application.

Therefore, staff finds that the duration for the violation is between the date the pump was installed (June 15, 2000) and the date the completed after-the-fact Pump Installation Permit was acknowledged as complete (December 1, 2000). However, staff is allowing for 3 days that the permittee thought a permit was obtained (between September 19, 2000 and September 22, 2000), and the 22 day review period between October 25, 2000 and November 16, 2000. This total duration amounts to 169-3-22 = 144 days.

Based on the Administrative and Civil Penalty Guideline (G01-01), the total recommended fine is $18,000 (refer to Exhibit 5) for the permittee, and $18,000 for the driller.

The fine is based on a finding of violation of $250/day. Staff feels that a mitigative component of $125/day can be applied because the applicant determined on their own that they were in violation.

However, staff feels that other than the initial determination of a lack of permit, there had been no good faith effort by the applicant to comply with Commission requirements. The Well Construction Permit clearly states that no pump installation work can commence without a pump installation permit. Also, the application was not accepted as complete until December 1, 2000 when Well Completion Report details were finally submitted to the Commission. Therefore, staff is recommending a total daily fine of $125.

Lastly, staff is not recommending any alternative to the fines. The applicant and/or driller or the Commission is free to suggest any alternative in accordance with the G-01-01 Guideline.

RECOMMENDATION:

That the Commission:


B. Impose a fine of $18,000 on the applicant, Hamakua Energy Partners, and $18,000 on Beylik as summarized in Exhibit 5 payable within 30 days.

C. Approve the issuance of an after-the-fact Pump Installation Permit for the Enserch #1 Well (Well No. 6528-02) after the fine is paid, subject to standard conditions in Exhibit 6, and the following special conditions:

1. The well should not be used for drinking water unless it is properly tested and treated.

2. If potable water is used to supply both domestic and irrigation purposes in a single system, the permittee 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
standard condition #2 and two reminders in the permit cover letter that the permit does not authorize work for a permanent pump installation. (Refer to Exhibit 9).

After December of 1999, the ownership of the well had been transferred to the new permittee, Hamakua Energy Partners (HEP). Hamakua Energy Partners contracted Tom Nance as their consultant and Beylik Drilling as their contractor for the Enserch 2 Well as early as December 30, 1999, and they subsequently worked on the Enserch 1 Well.

A key date is the installation of the pump without obtaining a pump installation permit from the Commission on June 15, 2000. This date is the start of the penalty period because it is the initial date that the violation occurred.

There appears to be a delay in the due diligence by HEP, the new permittee. It appears that due diligence regarding Commission requirements was initiated on or around September 12, 2000, approximately three months after the pump was installed. There was a period between June of 1999, when the transfer from Encogen to HEP started, and June 15, 2000 (the date the pump was installed) that the applicant could have determined whether or not the previous applicant obtained permits, or if additional permits were required. HEP has never explained why it did not even check whether it had a permit to install the pump until three months after the pump was already installed.

On September 19, 2000, staff misinformed HEP representatives that according to the CWRM Well database, a pump installation permit had been issued to the Permittee but was never returned to the Commission. The applicant also claims that an employee of the previous applicant claims he spoke with a “Ryan Yamada” who said that a pump installation permit was issued on March of 1999. Staff (Ryan Imata) does not believe he told anyone a Pump Installation Permit was issued as there was no copy in the file.

Three days later, staff contacted the applicant via telephone on September 22, 2000 to correct the misunderstanding and verified that no pump installation permit was issued and that the database entry was in error. Staff stated that if a pump was installed, that an after-the-fact pump installation permit was required. An after-the-fact pump installation permit application was submitted on October 25, 2000. However, the application was incomplete. Staff sent a letter back out to the applicant on November 16, 2000 stating that a Well Completion Report Part II was required before the Commission could accept the application as complete. The total period between the date the applicant was informed that an after-the-fact pump installation permit was necessary (September 22, 2000) and the date the Well Completion Report Part II was submitted (December 1, 2000) was 70 days. However, there was a period of 22 days under which the after-the-fact PIP was under review by staff (October 25, 2000 to November 16, 2000). Therefore, there was a total elapsed time of 48 days.

These 48 days are in excess of the 30 day compliance period that staff feels constitutes a good faith effort. Further, in the applicant’s letter dated August 2, 2001 (Exhibit 4), it appears that the applicant is attempting to draw attention to a mistake that staff had made on September 19, 2000, that has no bearing on either why the pump was installed without a permit or why a completed permit application wasn’t submitted within 30 days of finding out that a permit was not issued. Staff feels that this does not constitute a good faith effort on the part of the applicant.

Further, the driller has had 5 permits from the Commission under their current license number, and several more under the names Beylik and Roscoe Moss. The consultant also has many prior
STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

August 15, 2001
Honolulu, Oahu

Hamakua Energy Partners / Beylik Drilling
AFTER-THE-FACT PUMP INSTALLATION PERMIT APPLICATION
Enserch 1 Well (Well No. 6528-02)
Honokaa, Hawaii

APPLICANT/LANDOWNER:  DRILLER:
Hamakua Energy Partners  Beylik Drilling (Roscoe Moss)
P.O. Box 40  91-259-A Olai Street
Honokaa, HI 96727  Kapolei, Hawaii 96707

DESCRIPTION:

Location: (See Exhibit 1)

BACKGROUND:

For a background of dates and events, refer to Exhibit 3.

On June 15, 2000, a pump was installed in the subject well. On December 1, 2000, staff acknowledged a completed after-the-fact Pump Installation Permit application.

ISSUES/ANALYSIS:

HAR §13-168-12(a) states that:

No well shall be constructed, altered, or repaired and no pump or pumping equipment shall be installed, replaced, or repaired without an appropriate permit from the commission.

In Exhibit 3, all actions prior to December of 1999 involved Encogen Hawaii as the applicant, Waimea Water Services as the consultant, and Wai’eli Drilling as the driller. In the Well Construction Permit, the applicant was specifically informed under Well Construction Permit
AGENDA

FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: August 15, 2001
TIME: 9:00 a.m.
PLACE: DLNR Board Room
       Kalanimoku Building

1. Minutes of the July 18, 2001 meeting
2. Old Business/Announcements
3. Honolulu Board of Water Supply Briefing on the Status of its System
4. Andy Fitts, Wailei Drilling, AFTER-THE-FACT APPLICATION FOR WELL PERMIT,
   Moloaa Plantation (Well No. 1120-37), Well Abandonment: 6-inch Casing Diameter, 101-ft
   Deep Well, TMK 4-9-011:005, Koolau Road, Kauai
5. University of Hawaii, Kewalo Basin Marine Mammal Lab, AFTER-THE-FACT
   APPLICATION FOR A WATER USE PERMIT, Kewalo Basin Salt (Well No. 1751-05),
   TMK 2-1-58:60, Existing (Marine Research) Use for 1.440 mgd, Nuuanu (Caprock)
   Ground-Water Management Area, Oahu
   PERMIT APPLICATION, Enserch 1 Well (Well No. 6528-02), Honokaa, Hawaii
   PERMIT APPLICATION, Enserch 2 Well (Well No. 6528-03), Honokaa, Hawaii
8. Ms. Ardythe Harms, RECONSIDERATION OF FINES, Vacationland #1 through #4 Wells
   (Well No. 2979-02 through -05), Kapoho, Hawaii
9. Other Business

Materials related to items on this agenda are available for review at our office at 1151 Punchbowl Street, Room 227, and also will be available at the meeting.

Any person may testify or present information on any meeting agenda item, unless the item involves a proceeding in an existing contested case. In addition, if you have a legal interest that may be adversely affected by the proposed action, you may have a right to an administrative contested case hearing. You must make the request for such a hearing either orally or in writing at the public hearing or meeting for which this notice is given. Hawaii Administrative Rules (H.A.R.) Section 13-187-52(a). If you request a contested case hearing, you will have the opportunity to present to the Commission oral or written evidence or testimony or both to establish your standing. You may present your testimony or evidence on standing at the meeting or public hearing described above or, alternatively, at a hearing set by the Commission at a later date. If you request a contested case hearing either orally or in writing, you must also complete and file (or mail and postmark) a written petition for a contested case with the Commission within ten days after the date of the public hearing or meeting noticed here. Petition forms are available from the Commission. H.A.R. Section 13-187-52(a). If you do not make such a request or fail to file a timely written petition with the Commission, the consequence is that you will be precluded from later obtaining a contested case hearing and seeking judicial review of any adverse decision. H.A.R. Chapter 13-187. Disabled individuals planning to attend the public hearing or meeting are asked to contact the Commission at the above address or phone (Kauai) 274-3141 ext. 70214, (Maui) 984-2400 ext. 70214, (Hawaii) 974-4000 ext. 70214, (Molokai or Lanai) 1-800-GOV-INHI ext. 70214 or 587-0214 at least three days in advance of the public hearing or meeting to indicate if they have special needs which require accommodation.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Finding of violation (min $250)</th>
<th>Occurring in WMA (min $250)</th>
<th>Repeat violation (min $250)</th>
<th>Gravity component</th>
<th>Mitigative component</th>
<th>TOTAL DAILY FINES</th>
<th>Start date</th>
<th>End date</th>
<th>Total Days Talled</th>
<th>No. of days</th>
<th>Compliance within 30 days (yes/no)</th>
<th>Total duration of violation</th>
<th>Alternate settlement</th>
<th>Subtotal fine for one incident</th>
<th>No of incidents</th>
<th>Subtotal fines</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENSERCH 1</td>
<td>No Pump Installation Permit issued</td>
<td>$250</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>-$188</td>
<td>$62</td>
<td>6/15/2000</td>
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<td>$9,228</td>
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<tr>
<td>ENSERCH 2</td>
<td>No Pump Installation Permit issued</td>
<td>$250</td>
<td>$0</td>
<td>$250</td>
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<td>no</td>
<td>56</td>
<td>$6,944</td>
<td>1</td>
<td>$6,944</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL FINES**

$15,172

**NOTES**

A. Item No.

B. Description - description of the violation, see submittal text for specific rules violated

C. Finding of violation (min. $250) - where there is a violation, there is a minimum daily fine of $250

D. Occurring in WMA (min. $250) - When the violation is in a designated Water Management Area, there is a minimum additional daily fine of $250

E. Repeat violation (min. $250) - When the violation has committed violations in the past, there is a minimum additional daily fine of $250

F. Gravity component - allows for the increase of the daily fine

G. Mitigative component - allows for the decrease of the daily fine

H. TOTAL DAILY FINES - the sum of the values in columns C through G

I. Start date - the date where calculation of daily fines begins (date of notice of violation, or permit approval, or permit fully signed, or violation occurred, or CWRM order)

J. End date - the date of the end of the violation or latest CWRM meeting or completed permit application

K. Days tallied - the amount of days that are tallied, to be subtracted from the total duration of the violation

L. No. of days - calculated between start and end dates and subtracting the tallied days

M. Compliance within 30 days (yes/no) - if the applicant complies with the Commission staff's notice of violation requirements within 30 days

N. Total duration of violation - if there was compliance with staff notice of violation within 30 days, the duration shall be one (1) day. If there was no compliance with staff notice of violation within 30 days, the duration shall be the total days of the violation. However, gravity circumstances can increase the total days even if the 30 day compliance is met.

O. Alternate settlement (yes / no) - an alternate settlement in lieu of the daily fine was recommended

P. Subtotal fine for one incident - per incident fine

Q. No. of incidents - of violation that occurred for this investigation

R. Subtotal fines - the subtotal of fines, calculated by multiplying (per incident fine) * (no. of incidents)

**Beylik Fine Recalculation**
applications have been improperly delayed and further made subject to agency policies which are either not promulgated pursuant to the Hawaii Administrative Procedures Act ("HAPA"), or are, otherwise, not consistent with the applicable state law.

HEP's request is brought pursuant to Section 13-167-52 of the Rules of Practice and Procedure for the Commission on Water Resource Management. HEP is entitled to a contested case hearing under the State Water Code, Haw. Rev. Stat. § 174C-12. HEP asks that the Commission provide, by way of a contested case hearing, an opportunity to be heard and present evidence on the matter of its applications for pump installation permits prior to the findings of violation and imposition of civil penalties recommended by the Department.

The Department has recommended similar findings of violation and imposition of fines against the pump installation contractors, Beylik Drilling/Roscoe Moss ("Beylik"). However, Beylik is represented by independent counsel and is proceeding separately of HEP's request for a contested case in these matters.

For the foregoing reasons, HEP respectfully requests that the Commission grant this request for a contested case hearing.

Thank you for your time and attention in this matter.

Very truly yours,

[Signature]

Tim Lui-Kwan

cc: Larry Kachinsky, Hamakua Energy Partners
    William Moore, Beylik Drilling/Roscoe Moss
    Robert J. Smolenski, Esq., Attorney for Beylik Drilling
August 15, 2001

BY HAND DELIVERY

Gilbert Coloma-Agaran
Chairperson
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Request for Contested Case Hearing Regarding After-the-Fact Pump Installation Permits for Enserch Well Nos. 1 & 2, State Well Nos. 6528-02 & 6528-03 by Permittee: Hamakua Energy Partners, LP

Dear Mr. Coloma-Agaran:

Permittee Hamakua Energy Partners, LP ("HEP") respectfully requests that the Commission on Water Resource Management (the "Commission") grant HEP's request for a contested case hearing in the matter of the After-the-Fact Pump Installation Permits for two pumps: Enserch Well No. 1, State Well No 6528-02 and Enserch Well No. 2, State Well No. 6528-03. These matters are currently scheduled for action on the Commission's agenda for August 15, 2001 although we have only received the Staff Submittals ("submittals") regarding the subject applications late last week by fax.

These submittals, which include the Department's recommendations for the imposition of fines pursuant to the penalty guidelines (G01-01) adopted by the Commission on April 18, 2001, contain factual and legal inaccuracies. The subject
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: LINNEL

DATE: AUG 16 2001

TO: BAUER, G.
    CHING, F.
    DANBARA, S.
    FUJII, N.
    HARDY, R. ✔
    HIGA, D.
    HIRANO, E.
    ICE, C.
    IMATA, R. □
    JINNAI, R.

INIT.

TO: KUNIMURA, I.
    NAKAMA, L.
    NAKANO, D.
    NISHIOKA, L.
    OHYE, M.
    SAKODA, E.
    SUBIA, S.
    SWANSON, S.
    UYENO, D.
    YODA, K.

INIT.

FOR: Approval
     Signature
     Information

PLEASE:
     See Me
     Review & Comment
     Take Action
     Type Draft
     Type Final
     File
     Xerox ___ copies
     Last person - trash

Submitted to grant CDT in order if I'm recalling the last time we went to CDT.

Ed should be involved with this I imagine.
CARLSMITH BALL LLP
A LIMITED LIABILITY LAW PARTNERSHIP

PACIFIC TOWER, SUITE 2200
1001 BISHOP STREET
HONOLULU, HAWAII 96813
TELEPHONE (808) 523-2500  FAX (808) 523-0842
WWW.CARLSMITH.COM

FACSIMILE TRANSMISSION

UNLESS OTHERWISE INDICATED OR OBVIOUS FROM THE NATURE OF THE TRANSMITTAL, THE INFORMATION
CONTAINED IN THIS FACSIMILE MESSAGE IS ATTORNEY PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED FOR
THE USE OF THE INDIVIDUAL OR ENTITY NAMED BELOW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED
RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING IT TO THE INTENDED RECIPIENT, YOU ARE HEREBY
NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU
HAVE RECEIVED THIS COMMUNICATION IN ERROR OR ARE NOT SURE WHETHER IT IS PRIVILEGED, PLEASE IMMEDIATELY
NOTIFY US BY COLLECT TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S.
POSTAL SERVICE AT OUR EXPENSE. THANK YOU.

DATE:  August 27, 2001

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<tr>
<th>TO:</th>
<th>Name</th>
<th>Fax No.</th>
<th>Phone No.</th>
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<tr>
<td>Linnel T. Nishioka, Deputy Director</td>
<td>587-0219</td>
<td>587-0214</td>
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</tr>
<tr>
<td>Yvonne Izu, Esq.</td>
<td>587-2999</td>
<td>587-2992</td>
<td></td>
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</table>

FROM:  Jean K. Campbell

NUMBER OF PAGES INCLUDING THIS COVER SHEET: 3

CASE NAME:  Hamakua Energy Partners LP
CASE NUMBER:  052656-4

[Original/Copy will be mailed] [Original/Copy will not be mailed]

MESSAGE:  Please see attached.

If problems occur, please call our facsimile operator at (808) 523-2500, or Jean Campbell at 523-2519.
August 27, 2001

VIA FACSIMILE
AND U.S. MAIL

Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Withdrawal of Request for Contested Case Hearing

Dear Linnel:


It is our understanding that the effect of this withdrawal of request is that the matter of the pump installation permits and penalties assessed thereon will be put on the agenda for the Commission on Water Resource Management’s regular meeting on September 19, 2001. It is also our understanding that Hamakua Energy Partners may still make a request for a contested case hearing regarding this same matter prior to the close of the Commission’s September regular meeting.
We will be submitting the letter you suggested outlining factual inaccuracies in the August 15, 2001 staff submittals by August 31, 2001. Thank you for your attention and cooperation with this matter. Your assistance is appreciated.

Sincerely,

Tim Lui-Kwan

cc: Ms. Yvonne Izu, Esq.
    Paul Carpinone, TECO Energy
    Larry Kafchinski, Hamakua Energy Partners
    William Moore, Beylik Drilling
    Tom Nance, Water Resource Engineering
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See what the wind brings on 8/31.
demand for extended pump testing were conducted by telephone with Stone & Webster, the lender's engineering firm, with only minimal email documentation of these conversations. The email correspondence submitted to the staff represents the minimal documentation that was made of this process. In addition, the staff's unwillingness to acknowledge Stone & Webster because it is a representative of the lender is the equivalent of refusing to acknowledge Carlsmith Ball or Tom Nance as representatives of the applicant or the general contractor, a position the staff has never taken. The staff has never requested that HEP identify the lender itself. The applicant submitted the results of the extended pump testing promptly upon the request of the staff.

4. There is no published requirement for the submittal of both Well Completion Report parts 1 & 2 for an after-the-fact pump installation permit application. In fact, our review of past Commission actions on after-the-fact permit applications suggests that the requirement that both Well Completion Reports parts 1 & 2 be submitted for an after-the-fact application is not standard agency procedure.

If you have any questions, please contact me.

Sincerely,

Tim Lui-Kwan

cc: Yvonne Izu, Deputy Attorney General
Larry Kauchinski, Hamakua Energy Partners L.P.
Larry Fulton, J.A. Jones Ventures
Paul Carpinone, TECO Power Services
Linnel T. Nishioka, Deputy Director
August 30, 2001
Page 4

6. In the September 22, 2000 phone call, Ryan Imata did not "verify" that no permit had been issued nor did he state that an after-the-fact permit application "was necessary" at that time. In the September 22, 2000 phone call, Mr. Imata stated that he suspected that no permit had been issued but qualified this suspicion with the statement that, had a permit been issued, it would have been sent to the prior representative for the applicant at her Costa Mesa, California address. While I don't know when Tom Nance was retained by JBMH to prepare the application for the after-the-fact pump permit for this well, we spent at least another week to 10 days after Jean Campbell's telephone conference with Ryan Imata on September 22, 2000, trying to track down any documents that may have been sent to or received by the applicant's prior managing partner in Texas, its representative, Jody Allione in California, or to the current partners in North Carolina or Florida, as well as the project engineers/general contractors in Kansas City. We do not believe that the parties have been dilatory in submitting the subject application on October 25, 2000 where this well was drilled and developed by contractors and consultants no longer attached to the project and none of the background information was readily available. There is another discrepancy in your calculation of when the application was deemed complete (December 1, 2000). You note that the submission of part 2 of the Well Completion Report is required before an application is considered complete, however, I could find no published requirement for this. I was concerned that this may be a practice of the agency that has not been adopted pursuant to HAPA, and thus subject to arbitrary application and interpretation. We disagree with your conclusion that we have not acted in good faith in seeking compliance in this matter.

Enserch Well No. 2, State Well No. 6528-03:

1. The alleged violation of Well No. 2 cannot be a repeat violation because the Commission has not yet found HEP in violation for any other permit applications.

2. The pump installed in late December of 2000 was not installed at that time as the permanent pump. The pump, which would later become the permanent pump, was installed strictly for testing purposes.

3. The staff's failure to acknowledge the lender's demands for extended pump testing is unreasonable. Most of the conversations regarding this last-minute
a consulting firm brought in by TECO Power Services to review the project permits in late November of 1999, at the time of the change within the partnership. We believe that there was contact between CWRM staff Ryan Imata and ECT in early February of 2000 during which Mr. Imata told ECT that the pump installation permit for Well No. 1 had been issued and was valid until March 29, 2001 and that no other permits were necessary. This "misinformation" was communicated to the general contractor which had only been selected in December of 1999. The permanent pump was installed in June of 2000 by Beylik under the direction of JBMH, the project's general contractor, in apparent reliance on the ECT confirmation secured from its contact with CWRM staff in February of 2000. Additionally, Mr. John Pierce, the JBMH project director, also recalls a telephone confirmation from CWRM staff that there was a pump installation permit for this well prior to Beylik's installation of the permanent pump in June of 2000. Therefore, we take exception to the staff's representation that the applicant failed to take reasonable steps to determine if any additional permits were needed prior to installation of the permanent pump.

4. Your staff appears to take the position that the September 19, 2001 date is the first instance that they "misinformed" anyone as to issuance of the pump installation permit. As set out in the prior section, it is our strong belief that the staff's representation to Jean Campbell of my office on September 19, 2000 was only one in a series of communications going back to February of 2000.

5. The person who spoke with "Ryan Yamada" was not an employee of the previous applicant. John Pierce, the person who misunderstood Mr. Imata's name, was an employee of JBMH, the project general contractor. Our evidence confirms their conversation. We dispute the staff's belief that there were no representations that a pump installation permit was issued. Both the general contractor, JBMH, and the consultant, ECT, received the same incorrect information prior to installation of the permanent pump. Contrary to your statement that your staff's error has no bearing on why the pump was installed without a permit, we believe that the representations on the existence of a pump installation permit by your staff to the general contractor and the environmental consultant, ECT, was reasonable under the circumstances. Given the magnitude of this project, there is absolutely no reason why the general contractor would not have applied for a pump installation permit had he known one had not been issued prior to the installation of the permanent pump in June of 2000.
This letter is a brief outline of some of the inaccuracies I referred to in my August 15, 2001 letter. We can provide a more detailed presentation of these points to the Commission at its September 19, 2001 meeting.

Enserch Well No. 1, State Well No. 6528-02:

1. HEP did not contract with Tom Nance and/or Beylik Drilling ("Beylik"). Jones/Burns McDonnell Hamakua Joint Venture ("JBMH"), the general contractor for the project, is the party which actually contracted with the pump installation contractor, Beylik and the other consultants for this well. JBMH was contracted by HEP to design and build the turnkey facility for electrical cogeneration at Honokaa on the Island of Hawai‘i, including the development of the two wells to supply water to the power plant, and is a separate entity completely independent from the applicant, HEP. In Beylik's August 10, 2001 letter to you, Bill Moore is referring to the general contractor, Jones/Burns or JBMH, and not to the owner/applicant, HEP, which played no part in the construction of the plant nor provided any direction to Beylik or the other subcontractors in the development of the wells.

2. There was no transfer in the ownership of the well in December of 1999 to a new permittee. As we earlier described this to you and your staff during our meeting on July 26, 2001, there was a transfer of a general partnership interest within the limited partnership (Encogen Hawaii LP) on or about November of 1999 which resulted in a change of managing partners and the introduction of a new general partner (a subsidiary of TECO Power Services, which is an unregulated subsidiary of TECO, the Tampa Electric Company of Florida). There was a change in the name of the partnership (Hamakua Energy Partners LP) and amendment of the partnership agreement, however, there is no new permittee.

3. We disagree with your staff's position that HEP was not diligent in carrying out due diligence. Staff appears to have misunderstood the due diligence process we participated in fall of 2000 and further described in our meetings with you. As we stated then, the due diligence begun by Carlsmith Ball in September of 2000 was done in conjunction with post-construction refinancing by the lender John Hancock Group, totally unrelated to changes within the partnership or the management. Permit-related due diligence was, in fact, done by Environmental Consulting & Technologies, Inc. ("ECT"),
August 30, 2001

Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Enserch Well Nos. 1 & 2, State Well Nos. 6528-02 & 6528-03

Dear Linnel:

Thank you for your email message last week. I assume that you did receive my written withdrawal of our prior request for contested hearing on Monday which will allow the Commission to consider this matter at its next meeting on September 19. However, I was disappointed that the Department has chosen to stand by its August 15, 2001 recommendations to the Commission but I appreciate your invitation to describe some of our concerns on the statements contained in the staff submittals.

For the record, our firm represents Hamakua Energy Partners L.P. ("HEP") which is the owner of the subject wells and the applicant herein. We do not represent the drilling/pump installation contractors (either Waici Drilling or Beylik Drilling) for these wells or the general contractor (Jones/Burns & McDonnell Hamakua IV) that was responsible for building the electrical cogeneration facility in Honokaa.
DATE: August 30, 2001

TO: Linnel T. Nishioka, Deputy Director
    Yvonne Izu, Esq.

Fax No. 587-0219
      587-2999

Phone No. 587-0214
        587-2992

FROM: Tim Lui-Kwan

NUMBER OF PAGES INCLUDING THIS COVER SHEET: 6

CASE NAME: Hamakua Energy Partners LP
CASE NUMBER: 052656-4

ORIGINAL/COPY WILL BE MAILED

MESSAGE: Please see attached copy of my letter relating to statements contained in the Staff Submittals dated August 15, 2001 to the Commission.

If problems occur, please call our facsimile operator at (808) 523-2500, or Jean Campbell at 523-2519.
Linnel T. Nishioka, Deputy Director
August 27, 2001
Page 2

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Sincerely,

Tim Lui-Kwan

TLK:jkc
1426582.1.052656-00004

cc:  Ms. Yvonne Izu, Esq.
     Paul Carpinone, TECO Energy
     Larry Kafchinski, Hamakua Energy Partners
     William Moore, Beylik Drilling
     Tom Nance, Water Resource Engineering
August 27, 2001

VIA FACSIMILE
AND U.S. MAIL

Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Withdrawal of Request for Contested Case Hearing

Dear Linnel:


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| FROM: LINNELL | TO: BAUER, G. | INIT. | TO: KUNIMURA, I. | INIT. | FOR: Approval | PLEASE: See Me |
| DATE: AUG 29 2001 | CHING, F. | | NAKAMA, L. | | Signature | Review & Comment |
| | DANBARA, S. | | NAKANO, D. | | Information | Take Action |
| | FUJII, N. | | NISHIOKA, L. | | | Type Draft |
| | HARDY, R. | R | | | | Type Final |
| | HIGA, D. | R | OHYE, M. | | | File |
| | HIRANO, E. | | SAKODA, E. | | | Xerox ___ copies |
| | ICE, C. | | SUBIA, S. | | | Last person - trash |
| | IMATA, R. | | SWANSON, S. | | | |
| | JINNAI, R. | | UYENO, D. | | | |
| | | | YODA, K. | | | |

original for file
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Linnel T. Nishioka, Deputy Director  
August 30, 2001  
Page 2

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August 30, 2001

VIA FACSIMILE
AND U.S. MAIL

Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Enserch Well Nos. 1 & 2, State Well Nos. 6528-02 & 6528-03

Dear Linnel:

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COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: LINNEL
DATE: SEP - 4 2001
SUSPENSE DATE:

TO:  INIT.  TO:  INIT.  FOR:  PLEASE:
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  BAUER, G.   KUNIMURA, I.  ---  Approval
  CHING, F.   NAKAMA, L.  ---  Signature
  DANBARA, S.  NAKANO, D.  ---  Information
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  HARDY, R.   OHYE, M.   ---
  HIGA, D.   SAKODA, E.   ---
  HIRANO, E.   SUBIA, S.   ---
  ICE, C.   SWANSON, S.   ---
  IMATA, R.   UYENO, D.   ---
  JINNAI, R.   YODA, K.   ---

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--- Last person - trash

Original copy
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Sincerely,

Tim Lui-Kwan

cc: Yvonne Izu, Deputy Attorney General
Larry Kafchinski, Hamakua Energy Partners L.P.
Larry Fulton, J.A. Jones Ventures
Paul Carpinone, TECO Power Services
6. In the September 22, 2000 phone call, Ryan Imata did not "verify" that no permit had been issued nor did he state that an after-the-fact permit application "was necessary" at that time. In the September 22, 2000 phone call, Mr. Imata stated that he suspected that no permit had been issued but qualified this suspicion with the statement that, had a permit been issued, it would have been sent to the prior representative for the applicant at her Costa Mesa, California address. While I don’t know when Tom Nance was retained by JBMH to prepare the application for the after-the-fact pump permit for this well, we spent at least another week to 10 days after Jean Campbell’s telephone conference with Ryan Imata on September 22, 2000, trying to track down any documents that may have been sent to or received by the applicant’s prior managing partner in Texas, its representative, Jody Allione in California, or to the current partners in North Carolina or Florida, as well as the project engineers/general contractors in Kansas City. We do not believe that the parties have been dilatory in submitting the subject application on October 25, 2000 where this well was drilled and developed by contractors and consultants no longer attached to the project and none of the background information was readily available. There is another discrepancy in your calculation of when the application was deemed complete (December 1, 2000). You note that the submission of part 2 of the Well Completion Report is required before an application is considered complete, however, I could find no published requirement for this. I was concerned that this may be a practice of the agency that has not been adopted pursuant to HAPA, and thus subject to arbitrary application and interpretation. We disagree with your conclusion that we have not acted in good faith in seeking compliance in this matter.

Enserch Well No. 2, State Well No. 6528-03:

1. The alleged violation of Well No. 2 cannot be a repeat violation because the Commission has not yet found HEP in violation for any other permit applications.

2. The pump installed in late December of 2000 was not installed at that time as the permanent pump. The pump, which would later become the permanent pump, was installed strictly for testing purposes.

3. The staff’s failure to acknowledge the lender’s demands for extended pump testing is unreasonable. Most of the conversations regarding this last-minute
a consulting firm brought in by TECO Power Services to review the project permits in late November of 1999, at the time of the change within the partnership. We believe that there was contact between CWRM staff Ryan Imata and ECT in early February of 2000 during which Mr. Imata told ECT that the pump installation permit for Well No. 1 had been issued and was valid until March 29, 2001 and that no other permits were necessary. This "misinformation" was communicated to the general contractor which had only been selected in December of 1999. The permanent pump was installed in June of 2000 by Beylik under the direction of JBMH, the project’s general contractor, in apparent reliance on the ECT confirmation secured from its contact with CWRM staff in February of 2000. Additionally, Mr. John Pierce, the JBMH project director, also recalls a telephone confirmation from CWRM staff that there was a pump installation permit for this well prior to Beylik’s installation of the permanent pump in June of 2000. Therefore, we take exception to the staff’s representation that the applicant failed to take reasonable steps to determine if any additional permits were needed prior to installation of the permanent pump.

4. Your staff appears to take the position that the September 19, 2001 date is the first instance that they "misinformed" anyone as to issuance of the pump installation permit. As set out in the prior section, it is our strong belief that the staff’s representation to Jean Campbell of my office on September 19, 2000 was only one in a series of communications going back to February of 2000.

5. The person who spoke with "Ryan Yamada" was not an employee of the previous applicant. John Pierce, the person who misunderstood Mr. Imata’s name, was an employee of JBMH, the project general contractor. Our evidence confirms their conversation. We dispute the staff’s belief that there were no representations that a pump installation permit was issued. Both the general contractor, JBMH, and the consultant, ECT, received the same incorrect information prior to installation of the permanent pump. Contrary to your statement that your staff’s error has no bearing on why the pump was installed without a permit, we believe that the representations on the existence of a pump installation permit by your staff to the general contractor and the environmental consultant, ECT, was reasonable under the circumstances. Given the magnitude of this project, there is absolutely no reason why the general contractor would not have applied for a pump installation permit had he known one had not been issued prior to the installation of the permanent pump in June of 2000.
Linnel T. Nishioka, Deputy Director
August 30, 2001
Page 2

This letter is a brief outline of some of the inaccuracies I referred to in my August 15, 2001 letter. We can provide a more detailed presentation of these points to the Commission at its September 19, 2001 meeting.

Enserch Well No. 1, State Well No. 6528-02:

1. HEP did not contract with Tom Nance and/or Beylik Drilling ("Beylik"). Jones/Burns McDonnell Hamakua Joint Venture ("JBMH")*, the general contractor for the project, is the party which actually contracted with the pump installation contractor, Beylik and the other consultants for this well. JBMH was contracted by HEP to design and build the turnkey facility for electrical cogeneration at Honokaa on the Island of Hawai‘i, including the development of the two wells to supply water to the power plant, and is a separate entity completely independent from the applicant, HEP. In Beylik’s August 10, 2001 letter to you, Bill Moore is referring to the general contractor, Jones/Burns or JBMH, and not to the owner/applicant, HEP, which played no part in the construction of the plant nor provided any direction to Beylik or the other subcontractors in the development of the wells.

2. There was no transfer in the ownership of the well in December of 1999 to a new permittee. As we earlier described this to you and your staff during our meeting on July 26, 2001, there was a transfer of a general partnership interest within the limited partnership (Encogen Hawaii LP) on or about November of 1999 which resulted in a change of managing partners and the introduction of a new general partner (a subsidiary of TECO Power Services, which is an unregulated subsidiary of TECO, the Tampa Electric Company of Florida). There was a change in the name of the partnership (Hamakua Energy Partners LP) and amendment of the partnership agreement, however, there is no new permittee.

3. We disagree with your staff’s position that HEP was not diligent in carrying out due diligence. Staff appears to have misunderstood the due diligence process we participated in fall of 2000 and further described in our meetings with you. As we stated then, the due diligence begun by Carlsmith Ball in September of 2000 was done in conjunction with post-construction refinancing by the lender John Hancock Group, totally unrelated to changes within the partnership or the management. Permit-related due diligence was, in fact, done by Environmental Consulting & Technologies, Inc. ("ECT"),
August 30, 2001

VIA FACSIMILE
AND U.S. MAIL

Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Enserch Well Nos. 1 & 2, State Well Nos. 6528-02 & 6528-03

Dear Linnel:

Thank you for your email message last week. I assume that you did receive my written withdrawal of our prior request for contested hearing on Monday which will allow the Commission to consider this matter at its next meeting on September 19. However, I was disappointed that the Department has chosen to stand by its August 15, 2001 recommendations to the Commission but I appreciate your invitation to describe some of our concerns on the statements contained in the staff submittals.

For the record, our firm represents Hamakua Energy Partners L.P. ("HEP") which is the owner of the subject wells and the applicant herein. We do not represent the drilling/pump installation contractors (either Wailei Drilling or Beylik Drilling) for these wells or the general contractor (Jones/Burns & McDonnell Hamakua JV) that was responsible for building the electrical cogeneration facility in Honokaa.
## FINE CALCULATION

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Finding of violation (min $250)</th>
<th>Occurring in WMA (min $250)</th>
<th>Repeat violation (min $250)</th>
<th>Gravity component</th>
<th>Mitigative component</th>
<th>TOTAL DAILY FINES</th>
<th>Start date</th>
<th>End date</th>
<th>No of days</th>
<th>Compliance within 30 days (yes/no)</th>
<th>Total duration of violation</th>
<th>Alternate settlement</th>
<th>Subtotal fine for one incident</th>
<th>No. of incidents</th>
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### TOTAL FINES

$1,062,000

**NOTES**

A Item No
B Description - description of the violation, see submittal text for specific rules violated
C Finding of violation (min. $250) - where there is a violation, there is a minimum daily fine of $250
D Occurring in WMA (min. $250) - When the violation is in a designated Water Management Area, there is a minimum additional daily fine of $250
E Repeat violation (min. $250) - When the violator has committed violations in the past, there is a minimum additional daily fine of $250
F Gravity component - allows for the increase of the daily fine
G Mitigative component - allows for the decrease of the daily fine
H TOTAL DAILY FINES - the sum of the values in columns C through G
I Start date - the date where calculation of daily fines begins (date of notice of violation, or permit approval, or permit fully signed, or violation occurred, or CWRM order)
J End date - the date of the end of the violation or latest CWRM meeting or completed permit application
K No. of days - calculated between start and end dates
L Compliance within 30 days (yes/no) - if the applicant complies with the Commission staff's notice of violation requirements within 30 days
M Total duration of violation - if there was compliance with staff notice of violation within 30 days, the duration shall be one (1) day. If there was no compliance with staff notice of violation within 30 days, the duration shall be the total days of the violation
N Alternate settlement (yes / no) - an alternate settlement in lieu of the daily fine was recommended
O Subtotal fine for one incident - per incident fine
P No. of incidents - of violation that occurred for this investigation
Q Subtotal fines - the subtotal of fines, calculated by multiplying (per incident fine) * (no. of incidents)

**EXHIBIT 10: Maximum Fine Calculation**
WELL CONSTRUCTION PERMIT

Enserch Well, Well No. 6528-02

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 Enserch Well (Well No. 6528-02) at Honokaa, Hawaii, TMK 4-5-002: 023, 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.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee 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 basalt ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basalt ground water unless otherwise authorized by the Chairperson.

4. The permittee 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 shall stop work and contact the Department's Historic Preservation Division (587-0045) 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, msle) 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 shall comply with all applicable laws, rules, and ordinances, and 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 (1/23/97).

10. 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 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 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 must apply for a well abandonment permit in accordance with 13-168-12(6) prior to any well sealing or plugging work.

12. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: March 4, 1997
Expiration Date: March 4, 1999

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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee's Signature: ____________________________ Date: __________

Printed Name: ____________________________ Firm or Title: ____________________________

Driller's Signature: ____________________________ 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/ Safe Drinking Water & Wastewater Branches
Hawaii Department of Water Supply
Hamakua Sugar Company
Ms. Jody Allione
Encogen, Hawaii, L.P.
611 Anton Boulevard, #800
Costa Mesa, California  92626

Dear Ms. Allione:

Well Construction Permit
Enserch Well (Well No. 6528-02)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) which authorizes 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 12:

Special Conditions

1. No Special Conditions

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon information provided to and accepted by Commission staff from the aquifer pumping test results, as required in Well Construction & Pump Installation Standards (1/23/97), performed under this permit.

The well owner is 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.

Please sign and have the contractor sign the permit originals and return one for our files. Also, copies of the aquifer pump test procedure and the well completion report form are enclosed for your use. Please provide all the information in this packet to your well drilling contractor.

Attached for your reference are comments from the State Department of Health.

If you have any questions, please call Mr. Ryan Imata of Commission staff at 587-0255 or toll-free at 974-4000, extension 70255.

Aloha,

[Signature]

MICHAEL D. WILSON
Chairperson

Enclosures
MONTHLY GROUND WATER DELIVERY REPORT
(INFORMATION TO BE USED BY U.S. GEOLOGICAL SURVEY)

Report Month __________________ Year ________________

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use and other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 821, Honolulu HI 96808. For assistance, please call (808) 587-0264.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Delivery Begin Date (mm/dd/yy)</th>
<th>Delivery End Date (mm/dd/yy)</th>
<th>Quantity Delivered (gallons)</th>
<th>Type of Use*</th>
<th>Field No(s)</th>
<th>Acres Irrigated</th>
<th>Crop Type</th>
<th>Method of Measurement**</th>
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* Use of water code:
- AQ: Aquaculture
- C: Commercial
- D: Domestic
- ID: Irrigation - Drip
- IF: Irrigation - Furrow
- IS: Irrigation - Sprinkle

** For estimated values use code:
- P: Power consumption
- T: Total time of operation
- D: Comparison with past data
- X: Other means - (indicate method)

Other comments or additional information:

Submitted by (print) ____________________________ Title ____________________________

Signature ____________________________ Date ____________ Phone No. ____________________________

EXHIBIT 8: Water Use Report Forms
MONTHLY GROUND WATER USE REPORT

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 96820. For assistance, please call (808) 587-0264.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Period Begin Date (mm/dd/yy)</th>
<th>Period End Date (mm/dd/yy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method* of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp. (°F)</th>
<th>Non-Pumping Water Level (ft. above msl)**</th>
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</table>

* - Flow meter, electrical consumption, weir of 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...):

Submitted by (print) ________________________________ Title ________________________________

Signature __________________________________________________________________________ Date __________ Telephone No. __________________________

EXHIBIT 8: Water Use Report Forms
<table>
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<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (µhos)</th>
<th>Cl⁻ (mg/l)</th>
<th>Temp. °F or °C</th>
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1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery

Begin recovery data next page
Flow meter reading at end of pumped period: __________________ gals
### CONSTANT-RATE PUMP TEST DATA

**Table 2 (CRPTD Form 12/17/97)**

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**Flow Meter Reading Start:** gals

**START TEST** Date: __________ Time of day: __________

Pumped Well No. __________________ Observation well no. __________________

Pumped Well Name __________________ Distance between Obs. & Pumped Well ______ ft.

Target Q __________________ gpm Reference pt. for depth to water __________ ft. msl

Static Water Level @ start of test __________ ft. msl

Water level measurements by: □ steel tape  □ pressure transducer  □ airline

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END TEST  Date: ___________  Time of day: ___________

ADDITIONAL REMARKS: ____________________________________________

Person in charge of pump test (print): ____________________________

Signature: ______________________________________________________

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.

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Begin recovery data next page
Flow meter reading at end of pumped period: ____________ gals

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1. starting pumping rate Q
2. minimum length of step period of constant pumping rate
3. minimum mandatory Chloride (Cl') measurement/sampling at end of every step
4. Use same ending drawdown figure as start for recovery
Table 1 (SDPTD Form 12/17/97)

STEP-DRAWDOWN PUMP TEST DATA
(not required for wells producing < 100,000 gpd or 70 gpm)

Pumped Well No. __________________________ Observation well no. __________________________
Pumped Well Name ________________________ Distance between Obs. & Pumped Well ______ ft.
Target Q _______________ gpm Reference pt. for depth to water ______ ft. msl
Water level measurements by: □ steel tape □ pressure transducer □ airline
Static Water Level @ start of test ______ ft. msl

START TEST Date: ____________ Time of day: ____________

Flow Meter Reading Start: _____________ gals

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<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chloride sample taken</td>
</tr>
<tr>
<td>30²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Step 2 begin?</td>
</tr>
</tbody>
</table>

Exhibit 7
STANDARD PUMP INSTALLATION PERMIT CONDITIONS

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 Enserch 1 Well (Well No. 6528-02) at 45-300 Lehua Street, Hawaii, TMK 4-5-2: 56, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. 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 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 monthly basis, on forms provided by the Commission (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 is notified 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 applicant shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Commission within sixty (60) days after completion of work.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The pump installation permit application and staff submittal approved by the Commission at its September 19, 2001 meeting are incorporated into the permit by reference.

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 Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee 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 applicant must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

EXHIBIT 6: Pump Installation Permit Conditions
### FINE CALCULATION

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Finding of violation (min. $250)</th>
<th>Occurring in WMA (min. $250)</th>
<th>Repeat violation (min. $250)</th>
<th>Gravity component</th>
<th>Mitigative component</th>
<th>TOTAL DAILY FINES</th>
<th>Start date</th>
<th>End date</th>
<th>No. of days</th>
<th>Compliance within 30 days (yes/no)</th>
<th>Total duration of violation</th>
<th>Alternate settlement</th>
<th>Subtotal fine for one incident</th>
<th>No. of incidents</th>
<th>Subtotal fines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No Pump Installation Permit issued</td>
<td>$250</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>-$125</td>
<td>$125</td>
<td>6/15/2000</td>
<td>12/1/2000</td>
<td>144</td>
<td>no</td>
<td>144</td>
<td></td>
<td>$18,000</td>
<td>1</td>
<td>$18,000</td>
</tr>
</tbody>
</table>

**TOTAL FINES**

$18,000

---

**NOTES**

A. Item No - description of the violation, see submittal text for specific rules violated
B. Finding of violation (min. $250) - where there is a violation, there is a minimum daily fine of $250
C. Occurring in WMA (min. $250) - When the violation is in a designated Water Management Area, there is a minimum additional daily fine of $250
D. Repeat violation (min. $250) - When the violator has committed violations in the past, there is a minimum additional daily fine of $250
E. Gravity component - allows for the increase of the daily fine
F. Mitigative component - allows for the decrease of the daily fine
G. TOTAL DAILY FINES - the sum of the values in columns C through G
H. Start date - the date where calculation of daily fines begins (date of notice of violation, or permit approval, or permit fully signed, or violation occurred, or CWRM order)
I. End date - the date of the end of the violation or latest CWRM meeting or completed permit application
J. No. of days - calculated between start and end dates
K. Compliance within 30 days (yes/no) - if the applicant complies with the Commission staff's notice of violation requirements within 30 days
L. Total duration of violation - if there was compliance with staff notice of violation within 30 days, the duration shall be one (1) day. If there was no compliance with staff notice of violation within 30 days, the duration shall be the total days of the violation.
M. Alternate settlement (yes / no) - an alternate settlement in lieu of the daily fine was recommended
N. Subtotal fine for one incident - per incident fine
O. No. of Incidents - of violation that occurred for this investigation
P. Subtotal fines - the subtotal of fines, calculated by multiplying (per incident fine) * (no. of incidents)

**EXHIBIT 5: Fine Schedule**
We contacted Jody Allione who recalled receiving a partially completed application or an unsigned permit from the Water Commission and forwarding it on to Enserch’s Houston office for appropriate signature. Like the Water Commission, we have been unable to locate copies of either this application or an unsigned permit.

We Began the Application Process As Soon As We Realized We Did Not Have a Permit

By approximately October 4, 2000, we had come to suspect from our review of the records available to us that a pump installation permit application should be resubmitted. We then worked diligently with the project general contractor, the pump installation contractor for Well No. 1 and the consultant for Well No. 2 to complete and submit an after-the-fact pump installation permit application for Well No. 1. The completed application was submitted to the Water Commission on October 25th.

I hope this will assist you and your staff in making your recommendation to the Commissioners. Please contact me if you would like me to provide any further clarification or my correspondence supporting this letter. We truly appreciate your cooperation and assistance in this matter.

Respectfully,

Jean K. Campbell

cc: Tom Nance, Tom Nance Water Resource Engineering
     William Moore, Roscoe Moss/Beylik Drilling, Inc.
     Larry Kafchinsky, Hamakua Energy Partners, LP
I did not receive an immediate response from the Water Commission but John Pierce informed me that, while he did not have a copy of the permit, he had spoken to Ryan Yamada (presumably Ryan Imata) at the Water Commission, who had informed him that the pump installation permit was granted in March of 1999. Mr. Pierce returned a list of due diligence documents to me on or about September 12, 2000 indicating the same.

As of Late September, We Were Still Led to Believe That An Application Had Been Submitted

On or about September 19, 2000, I spoke with Roy Hardy of the Water Commission about the pump installation permit and was told that the permit was issued to Enserch on March 29, 1999, but that it was never returned signed by Enserch. He indicated that he would email me a copy of the permit that was final except for the deputy’s and Enserch’s signatures. Three days later on or about September 22, 2000, Ryan Imata called me saying that he then believed that the March 29, 2000 date in their data base was a mistake and that no pump installation permit was ever issued. If it had been, it would have gone to Jody Allione at the Enserch office in California. He also indicated that the last action on the permit application was a request to the owner for survey elevation data sometime roughly around March 1999. His records indicated that they had gotten no response so no permit was ever issued.

During the time period from the summer of 1999 until the end of that year, a transfer of partnership interests took place at Encogen Hawaii L.P. The original Encogen, the entity which would have submitted a pump installation permit application, was made up of Jones Hamakua Inc. and Enserch Development as partners. During the summer of 1999, Enserch began the process of transferring its partnership interest to TECO, the new partner, a process which legally occurred in November but took several months to actually complete. The Partnership was renamed Hamakua Energy Partners L.P. During the transfer process, Enserch produced voluminous documents covering many facets of project ownership and operation for Jones. Because Enserch had been the managing partner of Encogen, in control of the development of the project, including the permitting, any documents relating to the pump installation permit application sent by the Water Commission to it would have been transferred to Jones in the more than 35 boxes of documents turned over. Jones became the managing partner of the new Hamakua Energy Partners L.P. with TECO taking over much of the environmental permitting.
August 2, 2001

BY FAX AND U.S. MAIL

Linnel T. Nishioka
Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Enserch Well No. 1, State No. 6528-02: Pump Installation Permit Application

Dear Linnel:

Pursuant to your request made at our meeting on July 26, 2001, I am writing to describe the events and circumstances surrounding the pump installation permit application for Enserch Well No. 1, State No. 6528-02.

We began searching for the pump installation permit in early September 2000 as part of a due diligence effort in preparation for the refinancing of the project. Unable to locate either a permit or application in the files available to me, on or about September 11, 2000, I called both the project general contractor (John Pierce at Jones/Burns & McDonnell Hamakua Joint Venture) and the Water Commission to request copies of their files.

Initially, We Believed a Permit Had Been Issued
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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</thead>
<tbody>
<tr>
<td>12/26/96</td>
<td>Enserch 1 (6528-02) Well Construction Permit application received</td>
</tr>
<tr>
<td>2/20/97</td>
<td>Enserch 1 (6528-02) Additional info sent in by Waima Water Services</td>
</tr>
<tr>
<td>3/4/97</td>
<td>Well Construction Permit issued</td>
</tr>
<tr>
<td>7/28/97</td>
<td>Applicant requests extension to start date</td>
</tr>
<tr>
<td>8/14/97</td>
<td>CWRM extends start date to 5/1/98, but completion 3/4/99 same</td>
</tr>
<tr>
<td>4/23/98</td>
<td>Applicant requests extension to start date</td>
</tr>
<tr>
<td>6/19/98</td>
<td>CWRM extends start date to 11/1/98, but completion 3/4/99 same</td>
</tr>
<tr>
<td>12/30/98</td>
<td>Applicant sends in signed permit (Jody Allone/Dale Stromquist)</td>
</tr>
<tr>
<td>2/3/99</td>
<td>CWRM sends letter to Encogen Hawaii stating we need elev survey</td>
</tr>
<tr>
<td>3/29/99</td>
<td>Applicant sends in revised Well Completion Report Part I</td>
</tr>
<tr>
<td>6/1/99</td>
<td>Project transferral begins from Encogen Hawaii to Hamakua Energy Partners</td>
</tr>
<tr>
<td>12/4/99</td>
<td>Project transferred from Encogen Hawaii to Hamakua Energy Partners</td>
</tr>
<tr>
<td>12/30/99</td>
<td>Well Construction and Pump Installation Permit application received</td>
</tr>
<tr>
<td>1/19/00</td>
<td>WC and PI Permit application acknowledged as complete by CWRM</td>
</tr>
<tr>
<td>3/7/00</td>
<td>Well Construction Permit issued</td>
</tr>
<tr>
<td>6/15/00</td>
<td>Pump Installed</td>
</tr>
<tr>
<td>6/21/00</td>
<td>Well Construction Permit signed and returned to CWRM</td>
</tr>
<tr>
<td>9/12/00</td>
<td>J.Campbell receives due diligence docs indicating application made for PIP</td>
</tr>
<tr>
<td>9/19/00</td>
<td>CWRM tells Jean Campbell PIP issued (from database) - no hard copy found</td>
</tr>
<tr>
<td>9/22/00</td>
<td>Staff informs applicant that PIP not issued, and they should apply for ATF PIP</td>
</tr>
<tr>
<td>10/25/00</td>
<td>Tom Nance sends application in to CWRM for ATF Pump Installation</td>
</tr>
<tr>
<td>11/16/00</td>
<td>Staff sends out letter to applicant pointing out deficiencies in ATF PIP</td>
</tr>
<tr>
<td>12/1/00</td>
<td>WCR II submitted, ATF PIP application is acknowledged as complete</td>
</tr>
<tr>
<td>12/11/00</td>
<td>Test pump pulled</td>
</tr>
<tr>
<td>12/20/00</td>
<td>Permanent pump installed</td>
</tr>
<tr>
<td>1/10/01</td>
<td>Well Completion Report I and II sent in</td>
</tr>
<tr>
<td>1/10/01</td>
<td>Applicant sends in PIP application (not after the fact)</td>
</tr>
<tr>
<td>1/16/01</td>
<td>Staff sends out letter regarding acknowledgement of ATF PIP</td>
</tr>
<tr>
<td>3/5/01</td>
<td>Response sent to applicant re: PIP violation</td>
</tr>
<tr>
<td>8/15/01</td>
<td>Commission Action for driller (Beylik), CCH request by HEP</td>
</tr>
</tbody>
</table>

**EXHIBIT 3: Timeline**
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

S-6928-02 ENSERCH WELL #1

Bench mark elevation surveyed to nearest 0.01 ft. = 445.36 ft. mean sea level

Identify reference point elevation for water level measurements through chase tube

--- ft. mean sea level

describe reference point:

Top of Concrete Block

Pump intake depth = 466.3-3/8 ft.
(referenced to bench mark)

Chase tube depth = 460 ft.
(referenced to bench mark)

If airline installed, bottom of airline elevation = --- ft. mean sea level

EXHIBIT 2
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 521, 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/dowm/

1. State Well No.: 6528-03
   Well Name: Enserch #1 Well
   Island: Hawaii

2. Address: 45-300 Lehua St., Honokaa, HI 96727
   Tax Map Key: 45-002:056


4. Date Pump Installed: June 15, 2000

5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Submersible/Gould/F0 14310
   Rated Capacity: 700 gpm
   Motor Type, H.P., Voltage, rpm: Franklin - 125 - 3560
   Type of flow meter: Propeller which measures in GPM

6. Method of flow measurement:
   Water Flowmeter Manufacturer Specialties Make Saddle Size 10"
   • 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:

   [Blank space for remarks]

Pump Installation Contractor (print) Beylik Drilling, Inc. C-57/C-57a/A Lic. No. AC-22214
Signature William C. Moore Date November 22, 2000
Permittee (print) Larry F. Karchwinski
Signature Date 11/22/00

EXHIBIT 2
EXHIBIT 1: Location Map
labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water.

D. Suspend any current, pending or future applications by the applicant until the fines are paid and the applicant completes the permit process for this well.

Respectfully submitted,

[Signature]

LINNEL T. NISHIOKA
Deputy Director

Exhibit(s):

1. (Location Map)
2. (Well Completion Report)
3. (Timeline)
4. (Applicant letter dated August 2, 2001)
5. (Fine Schedule)
6. (Standard Pump Installation Permit Conditions)
7. (Pump Test Procedures)
8. (Water Use Report Form)
9. (Well Construction Permit and cover letter)
10. (Maximum Fine Schedule)
11. (Letter from Carlsmith Ball dated August 30, 2001)
No well shall be constructed, altered, or repaired and no pump or pumping equipment shall be installed, replaced, or repaired without an appropriate permit from the commission.

Additionally the period between 30 days after the completion of the pump installation and the submission of well completion report part II can be considered a violation of HAR §13-168-13, which states that:

Within thirty days after the completion of the well, the well driller or pump installation contractor, as the case may be, shall file with the commission on forms provided by the commission a well completion report containing as appropriate:

(1) State well number;
(2) Date of completion;
(3) Tax map key
Etc...

Finally, the date after which the pump was installed to the Commission meeting can constitute a period of non reporting according to HAR §13-168-7(b), which states that:

The owner or operator of any well of stream diversion works or battery of such water sources shall file a report of total water usage on a regular monthly (calendar or work schedule) basis to the commission on forms provided by the commission on or before the end of the month following the month for which water usage is to be reported.

Exhibit 10 summarizes the above maximum allowable fine provided for under the water code and its administrative rules, which is $1,061,000.

Lastly, staff is not recommending any alternative to the fines. The applicant and/or driller or the Commission is free to suggest any alternative in accordance with the G-01-01 Guideline.

RECOMMENDATION:

That the Commission:


B. Impose a fine of $18,000 on the applicant, Hamakua Energy Partners as summarized in Exhibit 5 payable within 30 days.

C. Approve the issuance of an after-the-fact Pump Installation Permit for the Enserch #1 Well (Well No. 6528-02) after the fine is paid, subject to standard conditions in Exhibit 6, and the following special conditions:

1. The well should not be used for drinking water unless it is properly tested and treated.

2. If potable water is used to supply both domestic and irrigation purposes in a single system, the permittee 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
Staff Submittal
September 19, 2001

An after-the-fact pump installation permit application was submitted on October 25, 2000. However, the application was incomplete. Staff sent a letter back out to the applicant on November 16, 2000 stating that a Well Completion Report Part II was required before the Commission could accept the application as complete. This is normal staff procedure to aid in the goal of compliance with the code. The total period between the date the applicant should have known that a pump installation permit was necessary (June 15, 2000) and the date the Well Completion Report Part II was submitted (December 1, 2000) was 169 days. However, there was a period of 22 days under which the after-the-fact PIP was under review by staff (October 25, 2000 to November 16, 2000). Therefore, there was a total elapsed time of 147 days. These 147 days are in excess of the 30 day compliance period that staff feels constitutes a good faith effort.

Therefore, staff finds that the duration for the violation is between the date the pump was installed (June 15, 2000) and the date the completed after-the-fact Pump Installation Permit was acknowledged as complete (December 1, 2000). However, staff is allowing for the 22 day review period between October 25, 2000 and November 16, 2000, in addition to the three days that Carlsmith Ball claims that staff told the applicant that a permit was issued (September 19, 2001 to September 21, 2001). This total duration amounts to 169-22-3 = 144 days.

Based on the Administrative and Civil Penalty Guideline (G01-01), the total recommended fine is $18,000 (refer to Exhibit 5). The fine is based on a finding of violation at $250/day, but a mitigative component of $125/day can be applied because the applicant determined on their own that they were in violation. However, staff feels that other than the initial determination of a lack of permit, there had been little good faith effort by the applicant to comply with permit and other Commission requirements to justify further reductions in the daily fine. Therefore, staff is recommending a total daily fine of $125 for a total duration of 144 days.

Potential maximum fine

Carlsmith Ball is contending that there is no published requirement for turning in the well completion report as a condition of accepting the After-the-Fact application as complete. It is staff’s policy to review background compliance issues with every application and any outstanding matters are brought to the applicant’s attention for action prior to accepting the application as a method of ensuring compliance with the code.

However, if Carlsmith Ball’s contention that there are no published requirements for acceptance of After-the-Fact applications, it can also be reasoned that there are no published allowances for After-the-Fact applications or permits from the CWRM, which could require non-discretionary removal of the pump and fines.

However, the Commission has authority and discretion under the code to enforce compliance with the code. Given this discretion, staff is outlining the maximum allowable violation in this case. The maximum violation can be calculated based on the date of the installation of the pump, to the date of the Commission meeting, since the pump remains installed. HAR §13-169-3(s) states that:

Any person who violates any provision of this chapter or any permit condition or who fails to comply with any order of the commission may be subject to a fine imposed by the commission. Such fine shall not exceed $1000 per violation. For a continuing offense, each day’s continuance is a separate violation.

§13-168-12(a) states that:
Staff Submittal

September 19, 2001

Beylik has had 5 permits under their current license number, and several more under the names Beylik Drilling and Roscoe Moss. Tom Nance has processed several Well Construction and Pump Installation Permits through the Commission. Both parties should have known that a permit was required to be signed and returned prior to installing the pump. Both Beylik Drilling and Tom Nance should also have known about the standard specification described in Section 4.1(a) of the Hawaii Well Construction and Pump Installation Standards, which states that:

The permit shall be prominently displayed at the site of the well at all times until the pump installation is completed.

Therefore, the fact is that no pump installation permit was ever issued for the Enserch No. 1 Well, and no party had ever signed a pump installation permit for this well, returned it to the Commission prior to installing the pump, nor was able to display a permit during pump installation work.

Pump installation

The key date is the installation of the pump without obtaining a pump installation permit from the Commission on June 15, 2000. This date is the start of the penalty period because it is the initial date that the violation occurred.

Carlsmith Ball claims that staff told them that a pump installation permit was issued. However, there was neither a copy of an issued permit nor a copy of a signed permit in the file. Additionally, there was no document that specified the size of the permitted pump. The application form does not constitute the permitted pump capacity. The pump capacity is permitted based on results from the standard pump tests. Therefore, the pump was installed without any specific permit conditions. Since Beylik and Tom Nance should understand that there are conditions required in the permit that restrict criteria such as the pump capacity, it follows that both Beylik and Tom Nance should have known that there was no pump installation permit issued as of this date. Otherwise, they should not have installed the pump without consulting a pump installation permit document and prominently displaying it at the well site.

Events occurring after the pump installation

All pump installation work requires a Well Completion Report Part 2 to be submitted within 30 days. This would mean that HEP and the driller should have submitted the report by July 15, 2000. The well completion report was not submitted until December 1, 2000.

Carlsmith Ball contends that staff again misinformed them that a pump installation permit was issued. The dates of the misinformation occurred between September 19, 2000 and September 22, 2000. Staff recalls the occurrence of these events, and staff finds that this is a reasonable claim, since an error in the database was discovered in that a permit was dated as issued but no approval date was listed. Staff contacted the applicant via telephone on September 22, 2000 to correct the misunderstanding and that the database entry was in error and it was verified that no permit had ever been issued. Carlsmith Ball contends that staff told the applicant that if a permit had been issued, it would have been sent to Jody Allione in California. Staff recalls spending the three-day period looking in the file for a hard copy of the permit and looking for the file on the network server, none of which were found. Therefore, staff finds it reasonable that there was a three-day period when the applicant was misinformed about a permit being obtained.
HAR §13-168-12(a) states that:

No well shall be constructed, altered, or repaired and no pump or pumping equipment shall be installed, replaced, or repaired without an appropriate permit from the commission.

Events leading to the installation of the pump

On or about November of 1999, there was a transfer of a general partnership interest within the limited partnership (Encogen Hawaii LP). There was also a change in the name of the partnership to Hamakua Energy Partners (HEP). While this might not have represented a "transfer" of ownership of the well, this represents a transfer of the permit from one permittee (Encogen Hawaii LP) to the current permittee (Hamakua Energy Partners). Jones/Burns McDonnell Hamakua Joint Venture (JBMH) was contracted by HEP to design and build the turnkey project for electrical cogeneration, including the two wells to supply water to the power plant. It is staff's understanding that JBMH had contracted with Tom Nance and Beylik Drilling as early as December 30, 1999 for the Enserch 2 Well, and the same parties also worked on the Enserch 1 Well.

Carlsmith Ball, as representatives of HEP, claims that there had been no transfer of the well ownership and there is no new permittee, since there was only a change in the name of the partnership and amendment of the partnership agreement. Therefore, no due diligence for permit review within the partnership was necessary as staff had earlier contended. Following that rationale, prior to pump installation, all parties involved should then have been familiar with CWRM regulatory conditions and goals specified within the Well Construction Permit, dated March 4, 1997, and signed by Encogen Hawaii LP. This Well Construction Permit indicated that the permit does not authorize work for a permanent pump installation under standard condition #2 and two reminders in the cover letter. (Refer to Exhibit 9).

In their more recent August 30, 2001 letter (attached as Exhibit 11), Carlsmith Ball now claims that they believe that there was contact between Ryan Imata of Commission Staff and Environmental Consulting and Technologies (ECT) in early February 2000 during which time Mr. Imata told ECT representatives that a pump installation permit was issued and no other permits were necessary. However, staff does not recall talking to ECT representatives, and no documentation has been provided by Carlsmith Ball to support this contention. Carlsmith Ball also claims that Mr. John Pierce of JBMH contacted CWRM staff and was told that a pump installation permit was issued. Staff does not recall telling anyone a pump installation permit was actually issued prior to pump installation. There has never been a hard copy of the permit in the file. Carlsmith Ball further stipulates that there was a fair amount of "misinformation" by CWRM staff. Staff disputes Carlsmith Ball's claims that staff told the applicant they had a permit prior to the installation of the pump. To date, Carlsmith Ball has not submitted documentation to substantiate this claim.

Every pump installation permit issued has a signature line for both the permittee and the driller, and specifically states that:

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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 921
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

September 19, 2001
Honolulu, Oahu

Hamakua Energy Partners
AFTER-THE-FACT PUMP INSTALLATION PERMIT APPLICATION
Enserch 1 Well (Well No. 6528-02)
Honokaa, Hawaii

APPLICANT/LANDOWNER:
Hamakua Energy Partners
P.O. Box 40
Honokaa, HI 96727

DESCRIPTION:
Location: (See Exhibit 1)

BACKGROUND:

For a background of dates and events, refer to Exhibit 3.

On June 15, 2000, a pump was installed in the subject well. On December 1, 2000, staff acknowledged a completed after-the-fact Pump Installation Permit application.

On August 15, 2001, the Commission found the pump installer, Beylik Drilling, in violation of not submitting a timely well completion report and assessed a fine of $250. At the same meeting, Hamakua Energy Partners requested a Contested Case Hearing. Because of this request, the Commission did not take action on Hamakua Energy Partner’s portion of the violation.

On August 27, 2001, the applicant withdrew the request for Contested Case Hearing, which is why the application is being brought back before the Commission today.

ISSUES/ANALYSIS:

HAR §13-168-12(a) states that:
September 26, 2001

Gilbert Coloma-Agaran, Chairperson
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809
Fax (808) 587-0219

Re: Enserch Well Nos. 1 & 2, State Well Nos. 6528-02 & 6528-03

Dear Chairperson Coloma-Agaran:

I am writing to inform you that I did not order the installation of the permanent pump in Well No. 2. The construction and installation was under the control of the E.P.C. Contractor, Jones Burns and MacDonnell during that period. I did direct extended testing of the water upon the request of the lenders engineer, Stone and Webster. I did not have any knowledge that this was not a permitted activity and would not have knowingly ordered such activity had I known it was not so. The Hamakua Energy Partners, TECO Power Services and J.A. Jones Ventures pride themselves in being good corporate citizens. It is not in our culture to violate any laws or regulations. It is part of my job to insure this is carried out in all of our dealings with others. Please feel free to contact me with any questions.

Sincerely,

[Signature]
Larry F. Kafchinski
General Manager
Hamakua Energy Partners
6. ECT also confirmed that the pump installation permit for well no. 2 was submitted and would be processed within 90 days of the December 14, 1999 submission date of the application.

7. TPS has used ECT to assist it in regulatory reviews for other projects and has found the company to be a reliable and responsible consultant.

8. It is my understanding that Sam Patterson has left ECT in the intervening time. However, his former supervisor, Vilma Brueggemeyer, is still at ECT and would be available to corroborate information and confirmation provided by her company to HEP relative to the pump installation permits for the subject wells.

FURTHER YOUR AFFIANT SAYETH NAUGHT.

[Signature]
PAUL L. CARPINONE

Subscribed and sworn to before me this 19th day of September, 2001.

[Signature]
Notary Public, State of Florida

My commission expires: 12/14/01
AFFIDAVIT OF PAUL CARPINONE

STATE OF FLORIDA  )
COUNTY OF Hillsborough  )

PAUL CARPINONE, being first duly sworn on oath deposes and says that:

1. I am a resident of Tampa, Florida and an employee of TECO Power Services Corporation (TPS), the primary shareholder of TPS Hamakua, Inc., which is a general partner of the Hamakua Energy Partners, LP (HEP).

2. I have personal knowledge of the following matters since I was the designated contact for consultants conducting reviews of regulatory permits secured or required for HEP’s electrical cogeneration project at Honokaa, Hawaii.

3. One of these consultants was Environmental Consulting & Technology, Inc. (ECT) which provided due diligence on HEP’s water well construction and pump installation permits.

4. On February 9, 2000, I received the attached e-mail message and table from Sam Patterson of ECT documenting his confirmation of HEP’s pump installation permit for well no. 1 which he understood was valid until March 29, 2001.

5. It was our understanding that no other permits were required to install the pump in HEP’s water well no. 1.
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Please feel free to contact me with any questions.

Sincerely,

Larry F. Katchinski
General Manager
Hamakua Energy Partners
Gilbert Coloma-Agana, Chairperson  
September 26, 2001  
Page 2

presented at the Commission meeting, HEP requests that the Commission waive the penalty imposed during the period of June 15 to September 19 because during this period HEP honestly, although in hindsight wrongly, relied on the Commission staff’s verbal representation that the same permit had been validly issued.

HEP would also like to offer the Commission the attached letter from plant operator Larry Kafchinski explaining the alleged December 2000 direction to proceed with installation of the permanent pump in Well No. 2 prior to the Commission’s issuance of the necessary pump installation permit. Mr. Kafchinski had no intention to flout the Commission’s rules and procedures.

HEP appreciates the Commission’s reconsideration of the penalty amounts. HEP has learned a great deal from this encounter and intends to be more careful in its selection and oversight of its consultants and contractors in the future. If you have any further concerns, please contact Mr. Lui-Kwan.

Sincerely,

Larry Kafchinski  
for Hamakua Energy Partners, LP

Enclosure

cc: Yvonne Y. Izu, Esq.  
Tim Lui-Kwan, Esq.
September 26, 2001

VIA FACSIMILE
AND U.S. MAIL

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Hamakua Energy Partners, LP ("HEP") would like to thank the Commission on Water Resource Management (the "Commission") for its recent consideration of the After-the-Fact Pump Installation Permits for the two HEP wells. HEP is disappointed with the Commission's decision to impose such significant penalties, but HEP, nonetheless, desires to cooperate fully with the Commission to resolve this matter. In keeping with this position, HEP would like to withdraw its verbal request for a contested case hearing made at the Commission meeting on August 19, 2001 by its attorney, Mr. Tim Lui-Kwan.

It has been HEP's intention from the commencement of this project to act as a good corporate citizen in its dealings with both the State and County and the community at large. While HEP accepts the Commission's recent findings of violation in connection with its two wells, HEP asks that the Commission recognize that these were no more than oversights on HEP's part, acts of omission rather than commission. HEP requests that the Commission reconsider the amount of the penalties it imposed.

HEP appreciates the Commission's recognition that no penalty should be imposed for the period from September 19 to September 22 because during that period, Commission staff led HEP to believe a valid permit had been issued. For the sake of consistency and in light of the evidence that HEP
**Hamakua Energy Partners, LP**

P. O. Box 40
45-300 Lehua Street
Honokaa, Hawaii 96727
Phone: (808) 775-1711
Fax: (808) 775-1801

---

**FAX TRANSMITTAL**

| To: | From: Larry Kachinski  
| General Manager |
|------|-----------------------------------|
| Company: | Date: 9/26/01 |
| Dept. of ATTY. Gen. | No. of Pgs. |
| Fax No.: | Ref. No. |
| (808) 587-2599 | |

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**Post-it Fax Note**

| To: Linnel  
| From: Yvonne Izu  
| Co./Dept. | Co. |
| Phone # | Phone # |
| Fax # | Fax # |
| 587-0219 | 72993 |

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1430121.1.052656-4
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**Remarks:**
- Line (1): Well Nos. 6528-02 & 6528-03
- Line (2): 
- Line (3): 
- Line (4): 

Total: 32,000.00

Name/Description (Wang Input):
- Hamakua Energy Partners

10/30/01 *0048* CHEC 32000.00

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**Hamakua Energy Partners**

200 Power Drive

Charlottesville, VA 22907

Pay: THIRTY TWO THOUSAND AND 00/100

TO THE ORDER OF

COMMISSION ON WATER RESOURCE MANAGEMENT

HONOLULU, HI 96809

AUTHORIZED SIGNATURE

William N. Barnett

**Date:**

3/24/01 $10000.00

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Checking Endorsement: Look for a reflective watermark - hold at an angle to view!

PLEASE MAKE CORRECTION AS NOTED - THANK YOU! (KATHY 587-3868)

Nov. 14 2001
PUMP INSTALLATION PERMIT
Ensench #1 and #2 Wells, Well No. 6528-02 and -03

Note: This permit shall be prominently displayed at the site until the work is completed

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 Ensench #1 and #2 Wells (Well No. 6528-02 and -03) at 45-30 Lehua Street, Hawaii, TMK 4-5-2: 56, 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 (each) gpm rated 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 and any related staff submittal approved by the Commission are incorporated into this permit by reference. The this permit is also 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: August 19, 2001
Expiration Date: August 19, 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
Hawaii Department of Water Supply
Carlsmith Ball

Department of Land and Natural Resources
Commission on Water Resource Management
Pump Installation Permit
Enserch #1 and #2 Wells (Well No. 6528-02 and -03)

Enclosed are two (2) originals of your approved After-the-Fact 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.

   The permittee, well operator, and/or well owner are responsible for all conditions of the permit. 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 your water use report form is enclosed for your use.

   Except for the monthly water use report form, please provide copies of all the information in this packet to your pump installation contractor.

   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,

   [Signature]

   GILBERT S. COLOMA-AGARAN
   Chairperson

Enclosure

c: Carlsmith Ball
Bench mark elevation surveyed to nearest 0.01 ft. = 450.01 ft. mean sea level

Elevation of top of chase tube = 453.66 ft. mean sea level

Pump intake depth = 464.3 ft. (referenced to bench mark)

Chase tube depth = 460 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = N/A 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 521, 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 587-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwm/

1. State Well No: 6528-02    Well Name: Enserch Well #1    Island: Hawaii
2. Address: 45-300 Lehua St, Honokaa, HI 96727    Tax Map Key: 4-5-002:056
4. Date Pump Installed: 7-5-02
5. PERMANENT PUMP INFORMATION (Attach pump specifications and rating curve)
   Pump Type, Make, Serial No: Submersible / Gould / 9RCLC
   Rated Capacity: 700 gpm at head of: 588 ft
   Motor Type, H.P., Voltage, rpm: Franklin - 150HP -480VAC - 3540 RPM
   Type of flow meter: Propeller which measures in GPM
   Model Number LP32    Serial Number 994114-10
   Pump type (check one):
   □ Deep Well Turbine
   □ Submersible
   □ Centrifugal
   □ Rotary
   □ Rotary-Displacement
   □ Propeller
   □ Reciprocating
   □ Rotary-Gear
   □ Impulse
   6. Method of flow measurement:
   □ Flowmeter Manufacturer Water Make Saddle Specialties Size 10"
   □ Weir □ Open Pipe □ Orifice □ Other, explain below
   "attach schematic"
7. Fill in the as-built section on the other side of this sheet.
8. Attach photograph of well and concrete pad clearly showing benchmark on concrete pad.
9. Other remarks/comments:
   Original motor failed 6/12/02. Replaced entire pump and motor with exact replacement.

Pump Installation Contractor (print) Herman Ludwig
Signature
Date 6/29/02
Permittee (print) Larry J. Karchinski
Signature
Date 7/1/02
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
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1. State Well No.: **6528-03**  Well Name: **Enserch #2 (HEP B)**  Island: **Hawaii**
2. Address: **45-300 Lehua St, Honokaa, HI 96727**  Tax Map Key: **45-002:056**
3. Pump Installation Company: **Puna Rental Inc.**
4. Date Pump Installed: **3-6-03**
5. PERMANENT PUMP INFORMATION (Attach pump specifications and rating curve)
   - Pump Type, Make, Serial No.: **Submersible/Gould 9RCLC**
   - Rated Capacity: **700 gpm** at head of: **588 ft.**
   - Motor Type, H.P., Voltage, rpm: **Franklin-150 HP-480VAC-3540 RPM**
   - Type of flow meter: **Propeller** which measures in **GPM**
     - Model Number **LP32**  Serial Number **994114-10**
   - Pump type (check one):
     - [ ] Deep Well Turbine  [ ] Rotary
     - [ ] Submersible  [ ] Rotary-Displacement
     - [ ] Centrifugal  [ ] Reciprocating
     - [ ] Propeller  [ ] Impulse
   - Method of flow measurement:
     - [ ] Flowmeter  Manufacturer **Water/Make Saddle**  Size **10"**
     - [ ] Weir  [ ] Open Pipe  [ ] Orifice*  [ ] Other*, explain below
     - *attach schematic
   - Specialties

7. Fill in the as-built section on the other side of this sheet.
8. Attach photograph of well and concrete pad clearly showing benchmark on concrete pad.
9. Other remarks/comments:

Pump Installation Contractor (print) **Herman Ludwig**  C-57/C-57a/A  Lic. No. **ABC 23175**
**Signature**

**Date 3/17/03**

Permittee (print) **Larry Kafchinski**
**Signature**

**Date 3/17/03**
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 450.01 ft. mean sea level

Elevation of top of chase tube = 452.84 ft. mean sea level

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

Chase tube depth = 460 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = N/A _____ 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 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 877-0225. For updates to this form or additional information, please visit the website at
http://www.state.hi.us/dlnr/cwrm/

1. State Well No.: 6528-02          Well Name: Enserch Well #1          Island: Hawaii
2. Address: 45-300 Lehua St., Honokaa, HI  Tax Map Key: 45-002:056
3. Pump Installation Company: Puna Rental Inc.  96727
4. Date Pump Installed: 12-16-02
5. PERMANENT PUMP INFORMATION (Attach pump specifications and rating curve)
   Pump Type, Make, Serial No.: Submersible/Gould 9RCLC
   Rated Capacity: 700 gpm at head of: 588 ft.
   Motor Type, H.P., Voltage, rpm: Franklin-150 HP-480VAC-3540 RPM
   Type of flow meter: Propeller which measures in GPM
   Model Number LP32 Serial Number 994114-10
   Pump type (check one):
   □ Deep Well Turbine    □ Rotary    □ Propeller
   □ Submersible          □ Rotary-Displacement □ Reciprocating
   □ Centrifugal          □ Rotary-Gear    □ Impulse
6. Method of flow measurement:
   • Flowmeter Manufacturer Water/Make Saddle Size 10"
   □ Weir □ Open Pipe □ Orifice* □ Other*, explain below
   *attach schematic
7. Fill in the as-built section on the other side of this sheet.
8. Attach photograph of well and concrete pad clearly showing benchmark on concrete pad.
9. Other remarks/comments:
   Current motor failed and entire pump/motor assembly replaced
   with exact replacement; motor failed 12-2-02. Motor cooling flow
   shroud installed.

Pump Installation Contractor (print) Herman Ludwig C-57/C-57a/A Lic. No. ABC 23175
Signature

Permittee (print) Larry Kafchinski
Signature

Date 3/12/03
Date 3/17/03
March 17, 2003

Mr. Ryan Imata  
State of Hawaii  
Dept. of Land & Natural Resources  
Commission on Water Resource Management  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Imata:

SUBJECT: Well Completion Reports for Well No. 6528-02 “Enserch Well No. 1” and 6528-03 “Enserch Well No. 2

On January 17, 2003 we submitted Well Completion Report on Well 6528-02 as “Enserch Well No. 2” in error. We are attaching the correct Well Completion Report for Well No. 6528-02 “Enserch Well No. 1”.

Also included is Well Completion Report for Enserch Well No. 2, 6528-03 that also experienced motor failure in February 2003.

As indicated in our previous correspondence, we have experienced multiple premature failures on the submersible pump motors. As a result of these failures, we were forced to conduct emergency replacement to swap the entire pump assembly with an exact duplicate. To avoid further premature failures, flow-inducing shrouds were installed on each pump/motor assembly to ensure adequate motor cooling is provided by the water flow as recommended by the motor manufacturer.

The work was performed in order to continue uninterrupted supply of electrical power to residents of the Big Island. The original pumps were replaced in kind and we will be evaluating the performance of the pump for potential future replacement of a different design pump of similar capacity.

If you have any questions or comments, please contact me at (808) 775-1711.

Sincerely,

Norman Verbanic  
Acting General Manager

Enclosure
9. AS-BUILT PUMP SECTION

Bench mark elevation surveyed to nearest 0.01 ft. = 451.01 ft. mean sea level

Elevation of top of chase tube 451.70 ft. mean sea level

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

Chase tube depth = 460.0 ft.
(referenced to bench mark)

If airline installed, bottom of airline elevation = NA _____ ft. mean sea level

WCR2 Form 12/4/01 Page 2 of 2
Permittee (primarily responsible individual):

Pump Installation Contractor (primarily responsible individual):

Pump Installation:

1. State Well No.: 6528-03
2. Well Name: Enseirn, Well No. 2003-03-03
4. Date Pump Installed: 12-16-02
5. PERMANENT PUMP INFORMATION (attach pump specifications and rating curve):
   - Pump Type: Submersible
   - Motor Type: HP, Voltage: 208/230, RPM: 1750
   - Rated Capacity: 90 GPM
6. Method of flow measurement:
   - Flowmeter
7. Fill in the as-built section on the other side of this sheet.
8. All other remarks and comments:
   - [Handwritten notes: Pump Replacement, ERRIN]
State of Hawaii  
Dept. of Land & Natural Resources  
Commission on Water Resource Management  
P. O. Box 621  
Honolulu, Hawaii 96809

Attention: Mr. Ryan Imata

Dear Mr. Imata:

SUBJECT: Well Completion Report for Well No. 6528-03

Attached is our Well Completion Report for the above-mentioned well. We experienced a premature failure on the originally installed submersible pump motor. As a result of this failure, we were forced to conduct emergency replacement to swap the entire pump assembly with an exact duplicate.

This work was performed in order to continue uninterrupted supply of electrical power to residents of the Big island. The original pump was replaced in kind and we will be evaluating the performance of the pump for potential future replacement of a different design pump of similar capacity.

Thank you for your cooperation. If you have any questions or comments, please do not hesitate to contact me at (808) 775-1711.

Sincerely,

[Signature]

Larry F. Kachinski  
General Manager

Enclosure
MEMO and ROUTE SLIP

WCR 2 Check for Well No. 6528-03 (survey to regulation memo)

1. **Pump Tests Check (special condition of PIP? Yes/No)**
   - **Gianin Bauer** (initial if yes)
   - **Yes**  **No**  **If no, describe deficiency**

   **Step-Drawdown Test:**
   - followed WCPI Stds
   - analysis attached
   - proposed pump cap o.k.

   **Aquifer Pump Test:**
   - followed WCPI Stds
   - T & S analysis attached

   **Well Interference:**
   - estimated Steady-State
   - drawdown at 1-mile radius is ______ ft.
   - analysis attached

   **Stream Surface Water Impacted:**
   - **Yes**  **No**  ➔ If yes, identify most probable stream

2. **Pump Installation Check**
   - **Mitch Ohye** (initial)
   - **Yes**  **No**  **If no, describe deficiency**

   - data complete
   - followed WCPI Stds
   - well database updated

3. Charley/Lenore/Ryan ________ (initial) take action based on above analysis

4. Roy_________ (initial) check

5. Subia_________ (initial) finalize

6. Dean_________ (initial) signature

7. Charley/Lenore/Ryan File
March 27, 2003

Mr. Norman Verbanic
Hamakua Energy Partners, LP
P.O. Box 40
Honokaa, HI 96727

Dear Mr. Verbanic:

Well Completion Report for Well No. 6528-02 & 6528-03

We received your Well Completion Reports Part II for the Enserch Wells No. 1 & 2 (Well Nos. 6528-02 & 6528-03) on March 18, 2003 and acknowledge that they are complete.

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,

[Signature]

ERNEST Y.W. LAU
Deputy Director

RI:ss
After the lift off was growth, but we cut it less 20%. Cleaning remedial procedures and 20 pages. 200 miles in 80 line a pump.

Not able at 1/2/05, water can be taken on.

No, not able.

(Initial) take action based on above analysis.

1. Pump Test Check Special Condition of PIP? Yes/No) Green Bauker

6/28/02 6528 WCR 2 Check For Wll No. (survey to regulation memo)

3/31/03

03/18/03

MEMO and ROUTE SLIP
STANDARD PUMP INSTALLATION PERMIT CONDITIONS

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 Enserch 1 Well (Well No. 6528-02) at 45-300 Lehua Street, Hawaii, TMK 4-5-2: 56, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. 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 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 monthly basis, on forms provided by the Commission (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 is 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 applicant shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Commission within sixty (60) days after completion of work.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The pump installation permit application and staff submittal approved by the Commission at its July 18, 2001 meeting are incorporated into the permit by reference.

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 Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee 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 applicant must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

EXHIBIT 6: Pump Installation Permit Conditions
<table>
<thead>
<tr>
<th>Suggested Elapsed Time (min)</th>
<th>Actual Elapsed Time (min)</th>
<th>Depth to Water (nearest 0.1 ft)</th>
<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (at least 6 steps) (gpm)</th>
<th>EC (millhos)</th>
<th>Cl⁻ (mg/l)</th>
<th>Temp. °F or °C</th>
<th>Data in this table is for:</th>
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<td>□ Observation Well</td>
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Data in this table is for:
- □ Pumped Well
- □ Observation Well

Remarks:

Max possible duration, water level or quality did not stabilize for any 24 period

Begin recovery data next page
Flow meter reading at end of pumped period:

____________________ gals

---

1 starting pumping rate Q
2 minimum length of step period of constant pumping rate
3 minimum mandatory Chloride (Cl⁻) measurement/sampling at end of every step
4 Use same ending drawdown figure as start for recovery
<table>
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<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth To Water (nearest 0.1 ft)</th>
<th>Recovery Drawdown S (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (umhos)</th>
<th>Cl⁻ (mg/l)</th>
<th>Temp: °F or °C</th>
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END TEST       Date: ___________ Time of day: ___________

ADDITIONAL REMARKS: ________________________________

Person in charge of pump test (print): ________________________________

Signature: _______________________________________________________

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
<table>
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<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Recovery Drawdown S (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (millis)</th>
<th>Cl^- (mg/l)</th>
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END TEST  Date: ____________ Time of day: ____________

ADDITIONAL REMARKS: ___________________________________________

Person in charge of pump test (print): ___________________________

Signature: ____________________________  The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES

MONTHLY GROUND WATER USE REPORT

Report Month _______ Year _______

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) 587-0264.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Period Begin Date (mm/dd/yy)</th>
<th>Period End Date (mm/dd/yy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method* of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp. (°F)</th>
<th>Non-Pumping Water Level (ft, above msl)**</th>
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* - Flow meter, electrical consumption, weir of 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...):

Submitted by (print) ___________________________ Title ___________________________

Signature ___________________________ Date __________ Telephone No. ___________________________
WELL CONSTRUCTION PERMIT

Enserch Well, Well No. 6528-02

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 Enserch Well (Well No. 6528-02) at Honokaa, Hawaii, TMK 4-5-002: 023, 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.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee 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 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 shall stop work and contact the Department's Historic Preservation Division (587-0045) 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 shall comply with all applicable laws, rules, and ordinances, and 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 (1/23/97).

10. 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 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 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 must apply for a well abandonment permit in accordance with §13-168-12(h) prior to any well sealing or plugging work.

12. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: March 4, 1997
Expiration Date: March 4, 1999

Michael D. Wilson, 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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee's Signature: ___________________________ Date: ___________________________

Printed Name: ___________________________ Firm or Title: ___________________________

Driller's Signature: ___________________________ 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/ Safe Drinking Water & Wastewater Branches
Hawaii Department of Water Supply
Hamakua Sugar Company

EXHIBIT 9
FACSIMILE TRANSMITTAL

Date: August 10, 2001
To: CWRM
Fax#: 587-0219
From: Bill Moore
Subj: Enserch Well No. 6528-02

No. of Pages (including coversh): 5
Attn: Ryan Imata
August 10, 2001

Ms. Linnel T. Nishioka  
Deputy Director  
Commission on Water Resource Mgmt.  
P.O. Box 621  
Honolulu, HI 96809

Ref: Enserch Well No. 6528-02  
Pump Installation Permit Application

Dear Ms. Nishioka:

This letter is written pursuant to our meeting on July 26, 2001 to summarize recollection of the events and circumstances which lead to our firm providing pump services for the installation of a customer supplied pump in Well No. 1 herein described as Enserch Well No. 6528-02 and 03.

Beylik Drilling, Inc.’s involvement in this matter actually began in late 1999 when Jones/Burns and McDonnell Hamakua Joint Venture Partners Site Representative Dennis Sturdevant requested Beylik Drilling to submit a quotation to drill Enserch Well No. 6528-02.

These negotiations began as a turnkey project with Beylik Drilling, Inc. providing consulting services. However, in subsequent conversations Jones/Burns & McDonnell personnel decided to manage that aspect of the job internally subsequently Beylik Drilling, Inc. was provided a set of plans and specifications with which to prepare its proposal and then submitted.

Subsequently Jones/Burns & McDonnell Hamakua Joint Venture notified Beylik Drilling, Inc. that it intended to award the well drilling work to Beylik Drilling, Inc., thereafter a number of telephone and fax messages were exchanged. Eventually Jones/Burns & McDonnell issued a contract as well as a tentative notice to proceed to Beylik Drilling, Inc.

It is important to note at this time that the submitted contract was designed among other things to link its subcontractors and to some extent materialman to the contract which Jones/Burns & McDonnell Hamakua Joint Venture had with its client Hawaiian Electric Company.
However the contract contained many unacceptable provisions among them were extensive liquidated damage language, subcontractor responsibilities, performance payments as well as edited standard contract boiler plate.

Through direct negotiation said contract was subsequently modified to accommodate Beylik Drilling, Inc.'s concerns, these negotiations were handled largely by phone, fax messages with Jones/Burns & McDonnell Hamakua Joint Venture personnel located at their South Carolina Office. These negotiations were facilitated by its local construction representative Dennis Sturdavant. This concluded the business arrangements, the contract was executed after which insurance and indemnification matters were satisfied as well as the contract bonding provisions. About this same time Beylik Drilling, Inc. was asked by Jones/Burns & McDonnell Hamakua Joint Venture to prepare and submit a proposal to supply and outfit Enserch Wells No. 6528-02, 03 with pumps and pertinent equipment based on specifications provided by Beylik Drilling, Inc.

A proposal was prepared and submitted. However, after submitting this proposal to the Jones/Burns South Carolina office, Beylik Drilling, Inc. was notified that this proposal was “over budget” and that Jones/Burns after some price shopping and specification modification decided to purchase a specification modified pump from a mainland supplier. Subsequently Beylik Drilling, Inc. withdrew its design/supply and install proposal thus concluding proposal responsibilities including matters pertaining to permitting. In due time beginning in January 2001 Beylik Drilling, Inc. was asked by Jones/Burns Civil Superintendent Dennis Sturdavant to submit a quotation to install the contractor furnished submersible pumps in Enserch Wells No. 1 and 2. It was noted by Jones/Burns personnel that time and budget were of the essence, subsequently a plan was developed to coordinate the pump installation to coincide with the completion of the drilling of Enserch Well No. 3, there of course is no question in anyone's mind that Jones/Burns & McDonnell Hamakua Joint Venture intended to outfit both wells with the specified pumps.

It was Beylik Drilling, Inc.'s understanding at that time and continuing throughout the duration of its involvement which included prior contract negotiations that all permit preparations and costs thereof would be handled by Jones/Burns who I understood at that time had specific assigned personnel for this purpose.

Herein lies the base of the problem, in the case of Enserch Well No. 2 which was drilled by others, it was assumed by others as well as myself that a pump installation permit had been applied for by that entity and that permit thus granted was still valid. However, it must be noted that this premise to be effective required verification. These conversations began in January 2000 and more or less ended by March 2000, Beylik Drilling was very active constructing...
Ms. Linnele T. Nishioka  
August 10, 2001  
Page 3

Enserch Well No. 6528-03, Jones/Burns & McDonnell Hamakua Joint Venture proceeded to design and construct the power plant, it was presumed by Beylik Drilling, Inc. that all administrative matters were being processed through its administrative unit with local consultants.

By May 2000 it became apparent that the drilling of Enserch Well No. 6528-03 would not be completed as previously scheduled and Beylik Drilling, Inc. was notified by Jones/Burns personnel to mobilize labor and equipment to install its pump in the Enserch Well No. 6528-02. Installation of the submersible pump in Enserch No. 6528-03 was scheduled at a later date and the work was subsequently done using nearly the same dialog which is herein described and supplied in correspondence and explanations submitted by Hamakua Partners thru its Agent Carlsmith Ball.

Conclusions:

It is our testimony that at no time during this period of construction and negotiation did Jones/Burns & McDonnell Hamakua Joint Venture personnel suggest in any way that any rules, regulations, laws, procedures or protocol be omitted, violated or ignored.

Additionally, my role with Beylik Drilling, Inc. as its RME, having held a Contractor's license with various "C" specialties for a period in excess of 30 years was not unaware of established permitting process established by the Commission on Water Resource Management. This administrative error developed pretty much as described in this report as well as the reports submitted by Hamakua Joint Venture, that is Beylik Drilling, Inc. proceeded with its work based on the understanding and assumptions which are outlined in this report. Likewise Hamakua Joint Ventures proceeded administratively as described in their letters of explanation. Each of the entities relying on communication and information which in the end analysis was misunderstood.

All of the above matters were brought to Beylik Drilling's attention when it became necessary to file an "after the fact" Pump Installation for Enserch Well No. 6528-03 which the Commission on Water Resource Management is aware and has all documents, explanations and justifications. However the matter of pump installation permit for Enserch Well No. 6528-02 came to light when Hamakua Joint Venture's legal team in the process of concluding construction closeout matters were unable to locate in its files the required permit documentation and subsequently brought that to the attention of the Commission on Water Resource Management. The process to date has been an involved process and I might add and expensive process to bring this matter to a fair and reasonable conclusion. The matter of pump installation permits were inadvertently overlooked for all of the reasons supplied in this report as well as the report supplied by Hamakua Joint Venture.
Ms. Linne T. Nishioka  
August 10, 2001  
Page 4  

Beylik Drilling is particularly chagrined and disappointed to be caught up in this administrative tangle, as its RME, I am equally disappointed that the system resulted in the muted communications herein described. It goes without saying we are sorry for the inconvenience, trouble and expense this matter has caused all involved and ask the Commission in its deliberations to treat this as an administrative error which has subsequently been corrected and to accept Beylik Drilling, Inc.’s testimony that proper steps have been taken to bring Beylik Drilling’s organization administrative procedures in compliance with any matter regarding the Commission and Water Resource Management Rules and Regulations.

Sincerely,

[Signature]

William C. Moore  
Vice President  

WCM:laf
August 10, 2001

WELL NO. 1 = 6528-02
WELL NO. 2 = 6528-03

Ms. Linnel T. Nishioka
Deputy Director
Commission on Water Resource Mgmt.
P.O. Box 621
Honolulu, HI 96809

Ref: Enserch Well No. 6528-02
Pump Installation Permit Application

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Ms. Linnel T. Nishioka  
August 10, 2001  
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Sincerely,

[Signature]

William C. Moore  
Vice President

WCM:laf
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT
10-20-00
99-92

APPLICANT INFORMATION: (Fill out all three, if applicable, and place a check mark in the primary contact)

1. (a) WELL OWNER: Hawaiian Energy Partners
   Contact Person: Larry Kato
   Mailing Address: P. O. Box 40
   Honolulu, Hawaii 96827
   Phone: 808-733-1711
   Fax: 808-733-1414

   (b) LAND OWNER: Hawaiian
   Contact Person: Larry Kato
   Mailing Address: P. O. Box 40
   Honolulu, Hawaii 96827
   Phone: 808-733-1711
   Fax: 808-733-1414

   (c) CONTRACTOR: Pono Energy Hawaii
   Contact Person: Eldon Poole
   Mailing Address: 91-218-A Old Street
   Kapolei, Hawaii 96707
   Phone: 808-534-6702
   Fax: 808-534-5688

   License No. A-33-1041

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

2. WELL NAME: ENSEC Wd. No. 1
   Location: Hawaii
   Address: 65-300 Loheni Street
   Honolulu, Hawaii 96821
   Tax Map Key: 4-5-07-00

   (a) Construct New Well
   (check all that apply)
   (b) Install New Pump
   (check all that apply)
   (c) Abandoned/Sealed

   State Well No.: 6529-02 (If unknown, please call Commission at 587-0220)

3. CONSTRUCTION
   (check all that apply)
   (a) Drilled
   (b) Dug
   (c) Shaft
   (d) Tunnel

   Is this well part of a battery of wells? (Yes) No (Please describe: See Remarks Below)

4. PROPOSED PUMP INFORMATION:

   Pump马 тип (check one):
   (a) Deep Well Pump
   (b) Submersible (100 HP)
   (c) Centrifugal

   Pump Type:
   (a) Rotary
   (b) Rotary-Displacement
   (c) Rotary-Gear
   (d) Impulse

   Propritor:

   No. of Dwellings Served:

   No. of Acres:

   Other (explain):

5. PROPOSED USE:

   (check all that apply)
   (a) Municipal (including hotel, stores, etc.)
   (b) Commercial (individual nonresidential water system)
   (c) Industrial (Power Plant, Insulating)

   Use:
   (a) Residential
   (b) Agriculture
   (c) Military

6. PROPOSED ACREAGE WITHDRAWAL:
   (a) Up to 864,000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:

   Other (explain):

   Water and Power:
   (a) CDP
   (b) SNAP
   (c) ESG
   (d) EA
   (e) Other (explain):

7. REMARKS: Explanation:

   Wells 1 and 2 (Nos. 6528-02 & 03) will be operated concurrently to supply the power plant.

   I understand that approval of this application requires the following compliance conditions: 1) the proposed work is to be completed within two years of the approval date; 2) the contractor shall submit to the Commission a well completion report no later than 60 days after the completion date of the proposed work; 3) any water use data shall be submitted to the Commission; 4) each approval shall be issued a determination to construct a water system that will not increase the demand on the aquifer or use up to the permitted pump capacity.

   Signature: ____________________________
   Date: ____________________________

   Signature: ____________________________
   Date: ____________________________

   Signature: ____________________________
   Date: ____________________________

   Signature: ____________________________
   Date: ____________________________

   Signature: ____________________________
   Date: ____________________________

For official use only:

Latitude: ____________________________
Longitude: ____________________________
Aquifer System No. ____________________________
State Well No. ____________________________
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT
1-9-01
99-92

APPLICATION INFORMATION:

1. (a) WELL OWNER: Hamakua Energy Partners Contact Person: Larry Kachinski Phone: 808-775-1711 Mailing Address: P.O. Box 40, Honokaa, Hawaii 96727 Fax: 808-775-1414 Email: 
(b) LAND OWNER: ENERGENE-HAMAKUA LAND Contact Person: Larry Kachinski Phone: 808-775-1711 Mailing Address: P.O. Box 40, Honokaa, Hawaii 96727 Fax: 808-775-1414 Email: 
(c) CONTRACTOR: Roscoe Moss Hawaii Contact Person: Bill Moore Phone: 682-5554 Mailing Address: 91-259-A Aiea Street Kapolei, Hawaii 96707 Fax: 682-6856 Email: 

WELL & PUMP INFORMATION:

2. WELL NAME: ENERGENE Well No. 2 Island: Hawaii Address: 45-300 Lehua St., Honokaa 96727 Tax Map Key: 4 5 02 56 Acre Sec Lot Period

3. PROPOSED WORK:
☐ Construct New Well ☐ Install New Pump
☐ Double Existing Well ☐ Modify Pump
☐ Abandon.well*

4. CONSTRUCTION:
☐ Drilled ☐ Dug ☐ Borehole ☐ Tunnel

5. PROPOSED PUMP INFORMATION:
Rated Pump Capacity: 600 gallons per minute

6. PROPOSED USE:
☐ Municipal (including hotels, stores, etc.) ☐ Industrial
☐ Domestic (individual, noncommercial water system) ☐ No. of Dwellings Units:
☐ Irrigation (crop) ☐ No. of Acres:
☐ Military ☐ Other (explain):

7. (a) PROPOSED AMOUNT OF WITHDRAWAL:
Up to 864,000 gallons per day
(b) METHOD OF FLOW MEASUREMENT:
☐ Flowmeter ☐ Orifice Plate ☐ Weir ☐ Other (explain)

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS:
☐ CDPR ☐ DMAP ☐ EIS ☐ EA ☐ None ☐ Os or (explain)

9. REMARKS, EXPLANATIONS:
Wells 1 and 2 (Nos. 6528-02 & 93) will be outfitted with 600 GPM pumps and operated concurrently to supply the power plant.

Signature
Date

For official use only
Adulter: System No.
State Well No.
Aloha Bob:

Pursuant to our telecon this morning, following is the letter our Owner received regarding the well completion reports that were submitted. Please review the issues that are being addressed by the Water Commission as soon as possible and contact me here at the job site at (808) 775-9585.

Sincerely,

Derrick Billena
Receiving
March 5, 2001

Mr. Larry Kafchinski
Hamakua Energy Partners
P.O. Box 40
Hokokaa, HI 96727

Dear Mr. Kafchinski:

Well Completion Report for Well No. 6528-03

We received your Well Completion Report Part I for the Ensorch #2 Well (Well No. 6528-03) on January 11, 2001. We also received your Well Completion Report Part II on February 14, 2001. Several issues, which must be addressed before we accept your reports as complete, are as follows:

1. Please clarify the water level as described on Items 6. and 9. on your Well Completion Report Part I. A ground elevation of 451.01 and a depth of 453.25 would indicate a negative water level.

2. Please inform us of the date the pump was installed in item 4. of your Well Completion Report Part II.

3. Please explain to us why a pump was installed prior to our issuance of a permanent Pump Installation Permit.

Please respond to the above item(s) within sixty (60) days of this letter's date. Failure to do so may result in fines of up to $1000 per day.

We are returning your application to your consultant to complete the application.

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

Rt:ky
c. Tom Nance Water Resource Engineering
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 587-6235. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwm/

1. State Well No.: 6284-03  Well Name: Enserch #2 Well  Island: Hawaii
2. Address: 45-300 Lehua St., Honoakaa, HI 96727  Tax Map Key: 45-002:056
4. Date Pump Installed: 2/24/01
5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Submersible/Goulds/PD 14310  Rated Capacity: 700 gpm
   Motor Type, H.P., Voltage, rpm: Franklin - 125 - 3540
   Type of flow meter: Propeller  which measures in CPM
6. Method of flow measurement:
   □ Flowmeter  Manufacturer Specialties Make Saddle Size 10"
   □ 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: 4/4/01, #5-6284-03 Enserch 2

Pump Installation Contractor (print)  Beylik Drilling, Inc.  C-57/C-57a/A Lic. No.  AC-22216
Signature  William C. Moore  Date  January 29, 2001
Permittee (print)  Larry Kibeishi
Signature  Date  01/29/01
March 16, 2001

Ms. Linnel T. Nishioka
Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, HI 96809

Subject: Well Completion Report for Well No. 6528-03

Dear Ms. Nishioka:

I am writing pursuant to your letter dated March 5, 2001 addressed to Mr. Larry Kazchinski of Hamakua Energy Partners. I would like to clarify the three issues stated in your letter so that the reports can be accepted as complete.

1. The correct depth to water is 448.30' (Item 6) and the water level is in fact 2.71' above msl (Item 9).

2. The pump was set on December 20, 2000 (Item 4).

3. Due to the lengthy time it took to complete this job and the power plant's tight construction schedule, the permanent pump was installed immediately following the pump test because we were required to remove our equipment from the site as soon as possible to allow for the power plant's final phases of construction to be completed. Additionally, there was a rush on the part of the lender to perform a successful long-term test using the permanent pump. This test lasted 14 days and was performed as a requirement to complete financing of the project.

Should you require any other information or have any questions please do not hesitate to call.

Sincerely,

[Signature]

Robert A. G lascott
Project Manager

rag:lf
Cc: Mr. Larry Kazchinski, Hamakua Energy Partners

EXHIBIT 4
August 2, 2001

BY FAX AND U.S. MAIL

Linnel T. Nishioka
Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Enserch Well No. 1, State No. 6528-02: Pump Installation Permit Application

Dear Linnel:

Pursuant to your request made at our meeting on July 26, 2001, I am writing to describe the events and circumstances surrounding the pump installation permit application for Enserch Well No. 1, State No. 6528-02.

We began searching for the pump installation permit in early September 2000 as part of a due diligence effort in preparation for the refinancing of the project. Unable to locate either a permit or application in the files available to me, on or about September 11, 2000, I called both the project general contractor (John Pierce at Jones/Burns & McDonnell Hamakua Joint Venture) and the Water Commission to request copies of their files.

Initially, We Believed a Permit Had Been Issued
I did not receive an immediate response from the Water Commission but John Pierce informed me that, while he did not have a copy of the permit, he had spoken to Ryan Yamada (presumably Ryan Imata) at the Water Commission, who had informed him that the pump installation permit was granted in March of 1999. Mr. Pierce returned a list of due diligence documents to me on or about September 12, 2000 indicating the same.

As of Late September, We Were Still Led to Believe That An Application Had Been Submitted

On or about September 19, 2000, I spoke with Roy Hardy of the Water Commission about the pump installation permit and was told that the permit was issued to Enserch on March 29, 1999, but that it was never returned signed by Enserch. He indicated that he would email me a copy of the permit that was final except for the deputy’s and Enserch’s signatures. Three days later on or about September 22, 2000, Ryan Imata called me saying that he then believed that the March 29, 2000 date in their database was a mistake and that no pump installation permit was ever issued. If it had been, it would have gone to Jody Allione at the Enserch office in California. He also indicated that the last action on the permit application was a request to the owner for survey elevation data sometime roughly around March 1999. His records indicated that they had gotten no response so no permit was ever issued.

During the time period from the summer of 1999 until the end of that year, a transfer of partnership interests took place at Encogen Hawaii L.P. The original Encogen, the entity which would have submitted a pump installation permit application, was made up of Jones Hamakua Inc. and Enserch Development as partners. During the summer of 1999, Enserch began the process of transferring its partnership interest to TECO, the new partner, a process which legally occurred in November but took several months to actually complete. The Partnership was renamed Hamakua Energy Partners L.P. During the transfer process, Enserch produced voluminous documents covering many facets of project ownership and operation for Jones. Because Enserch had been the managing partner of Encogen, in control of the development of the project, including the permitting, any documents relating to the pump installation permit application sent by the Water Commission to it would have been transferred to Jones in the more than 35 boxes of documents turned over. Jones became the managing partner of the new Hamakua Energy Partners L.P. with TECO taking over much of the environmental permitting.
Linnel T. Nishioka  
Deputy Director  
August 2, 2001  
Page 3

We contacted Jody Allione who recalled receiving a partially completed application or an unsigned permit from the Water Commission and forwarding it on to Enserch’s Houston office for appropriate signature. Like the Water Commission, we have been unable to locate copies of either this application or an unsigned permit.

We Began the Application Process As Soon As We Realized We Did Not Have a Permit

By approximately October 4, 2000, we had come to suspect from our review of the records available to us that a pump installation permit application should be resubmitted. We then worked diligently with the project general contractor, the pump installation contractor for Well No. 1 and the consultant for Well No. 2 to complete and submit an after-the-fact pump installation permit application for Well No. 1. The completed application was submitted to the Water Commission on October 25th.

I hope this will assist you and your staff in making your recommendation to the Commissioners. Please contact me if you would like me to provide any further clarification or my correspondence supporting this letter. We truly appreciate your cooperation and assistance in this matter.

Respectfully,

Jean K. Campbell

cc: Tom Nance, Tom Nance Water Resource Engineering  
William Moore, Roscoe Moss/Beylik Drilling, Inc.  
Larry Kafchinsky, Hamakua Energy Partners, LP
DATE: May 2, 2001

TO: Roy Hardy
   Fax No. 587-0219
   Phone No. 587-0222

FROM: Jean K. Campbell

NUMBER OF PAGES INCLUDING THIS COVER SHEET: 11

CASE NAME: Hamakua Energy Partners
CASE NUMBER: 052656-4

x ORIGINAL/COPY WILL NOT BE MAILED

MESSAGE: Roy,

Here are (1) the Well Completion Part II for Well no. 1; (2) the Jan. 16, 2001 letter acknowledging receipt of the same; (3) Well Completion Report Parts I & II for Well no. 2; and (4) the March 5 letter asking for clarification of 3 issues.

Please note there is a typo on the Well Completion Report Part II for Well no. 1. I pointed it out to Ryan earlier and he said he took note of it and should have changed it on his copy. The State well no. is listed as 6528-03 when it should be 6528-02.

If problems occur, please call our facsimile operator at (808) 523-2500, or Jean at 523-2519.
Roy Hardy  
May 2, 2001  
Page 2

Also, I called Larry Kafchinsky at Hamakua Energy Partners to see how he has responded to the March 5 request for clarification. Larry is out of the office for the rest of the day so I will talk to him tomorrow and get back to you with that information.

Thank you so much for your attention to these permit applications. If you need any other documents or have any questions please call me at 523-2519.

Aloha,  
Jean Campbell
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 521, 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 808-586-0223. For updates to this form or additional information, please visit our website at
http://www.state.hi.us/dlnr/cwmnr/

1. State Well No.: 6528-022
   Well Name: Enserch #1 Well
   Island: Hawaii

2. Address: 45-300 Lehua St., Honokaa, HI 96727
   Tax Map Key: 45-002:056


4. Date Pump Installed: June 15, 2000

5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Submersible/Gould/F0 14310
   Rated Capacity: 700 gpm
   Motor Type, H.P., Voltage, rpm: Franklin - 125 - 3540
   Type of flow meter: Propeller which measures in GPM

6. Method of flow measurement:
   Water Flowmeter Manufacturer Specialties Make Saddle Size 10"
   □ 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) Beylik Drilling, Inc. C-57/C-57a/A Lic. No. AC-22214
Signature
William C. Moore Date November 22, 2000
Permittee (print)
Signature
Larry F. Karchinski Date 11/22/00
WCR2 Form 5/2/00
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

8-1528-02 ENGERCH WELL #1

**Bench mark elevation surveyed to nearest 0.01 ft. = 442.04 ft. mean sea level**

**Identify reference point elevation for water level measurements through chase tube**

**Chase tube depth = 460 ft.**
(referenced to bench mark)

**Pump intake depth = 666'-3'' ft.**
(referenced to bench mark)

**If airline installed, bottom of airline elevation =**

**ft. mean sea level**

**Describe reference point:**

Top of Concrete Block
Mr. Larry Kafchinski  
Hamakua Energy Partners  
P.O. Box 40  
Honokaa, HI 96727

Dear Mr. Kafchinski:

After-The-Fact Pump Installation Permit Application for Well No. 6528-02

We acknowledge receipt, on December 1, 2000, of your completed After-The-Fact Pump Installation permit application and filing fee for the Enserch Well No. 1 (Well No. 6528-02). Since your pump installation permit application is after the fact, we will need to take your application to the Commission for appropriate action. We will inform you of the Commission meeting that your application will be addressed at a later time.

This letter is also an acknowledgement of receipt of your Well Completion Report Part II. However, other requirements may be imposed when action is taken upon your application by the Commission.

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 (Mau), or 1-800-468-4644 (Lanai & Molokai) extension 70255.

Sincerely,

LINNEL T. NISHIOKA  
Deputy Director

cc: Tom Nance Water Resource Engineering
FACSIMILE TRANSMISSION

UNLESS OTHERWISE INDICATED OR OBVIOUS FROM THE NATURE OF THE TRANSMITTAL, THE INFORMATION CONTAINED IN THIS FACSIMILE MESSAGE IS ATTORNEY PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED BELOW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING IT TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR OR ARE NOT SURE WHETHER IT IS PRIVILEGED, PLEASE IMMEDIATELY NOTIFY US BY COLLECT TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE AT OUR EXPENSE. THANK YOU.

DATE: August 2, 2001

<table>
<thead>
<tr>
<th>TO:</th>
<th>Name</th>
<th>Fax No.</th>
<th>Phone No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linnel T. Nishioka</td>
<td>587-0219</td>
<td>587-0214</td>
<td></td>
</tr>
</tbody>
</table>

FROM: Jean K. Campbell

NUMBER OF PAGES INCLUDING THIS COVER SHEET: 13

CASE NAME: Hamakua Energy Partners
CASE NUMBER: 052656-4

ORIGINAL/COPY WILL BE MAILED

MESSAGE: Linnel,

Here are the two letters you requested regarding Enserch Well Nos. 1 & 2. If we can provide any thing further, please let us know.

If problems occur, please call our facsimile operator at (808) 523-2500, or Jean at 523-2519.
BY FAX AND U.S. MAIL

Linnel T. Nishioka
Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Enserch Well No. 1, State No. 6528-02: Pump Installation Permit Application

Dear Linnel:

Pursuant to your request made at our meeting on July 26, 2001, I am writing to describe the events and circumstances surrounding the pump installation permit application for Enserch Well No. 1, State No. 6528-02.

We began searching for the pump installation permit in early September 2000 as part of a due diligence effort in preparation for the refinancing of the project. Unable to locate either a permit or application in the files available to me, on or about September 11, 2000, I called both the project general contractor (John Pierce at Jones/Burns & McDonnell Hamakua Joint Venture) and the Water Commission to request copies of their files.

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Linnel T. Nishioka  
Deputy Director  
August 2, 2001  
Page 3  

We contacted Jody Allione who recalled receiving a partially completed application or an unsigned permit from the Water Commission and forwarding it on to Enserch’s Houston office for appropriate signature. Like the Water Commission, we have been unable to locate copies of either this application or an unsigned permit.

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By approximately October 4, 2000, we had come to suspect from our review of the records available to us that a pump installation permit application should be resubmitted. We then worked diligently with the project general contractor, the pump installation contractor for Well No. 1 and the consultant for Well No. 2 to complete and submit an after-the-fact pump installation permit application for Well No. 1. The completed application was submitted to the Water Commission on October 25th.

I hope this will assist you and your staff in making your recommendation to the Commissioners. Please contact me if you would like me to provide any further clarification or my correspondence supporting this letter. We truly appreciate your cooperation and assistance in this matter.

Respectfully,

Jean K. Campbell

cc: Tom Nance, Tom Nance Water Resource Engineering  
William Moore, Roscoe Moss/Beylik Drilling, Inc.  
Larry Kafchinsky, Hamakua Energy Partners, LP
August 2, 2001

BY FAX AND U.S. MAIL

Linnel T. Nishioka  
Deputy Director  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Re:  HEP Well No. 2, State No. 6528-03: Pump Installation Permit Application

Dear Linnel:

At our meeting on July 26, 2001, you requested that I provide you with a letter detailing the facts and circumstances of the events of December 2000 and January 2001 surrounding the pump testing of Hamakua Energy Partners L.P.'s ("H.E.P.") Well No. 2, State No. 6528-03. I am writing to provide you and your staff with the information you requested in order that you may make your recommendation to the Commissioners.

According to our records, the pump testing required as a condition to the Well Construction Permit was conducted using an engine-driven test pump from December 11 to 13, 2000, which data was reported to the Commission in Well Completion Report Part I for Well No. 2. Following the testing, the test pump was removed and prepared for shipping to another job site where the drilling contractor needed to utilize it. Believing there was no imminent need to utilize Well No. 2, Tom Nance, the well and pump consultant, did not immediately submit a pump installation permit application.
Linnel T. Nishioka  
Deputy Director  
August 2, 2001  
Page 2

On or about December 13 or 14, H.E.P. was contacted about a request for additional pump testing from Stone & Webster, an engineering firm employed by the lender involved in the ongoing refinancing of the project. During this time period, there was a very concerted effort by all involved to complete the refinancing transaction by an imminent deadline. Stone & Webster required that an extended pump test, running both Well Nos. 1 and 2 concurrently, be conducted immediately. Stone & Webster insisted that the extended pump test run for a minimum of five days in duration, include various water quality testing and that this testing be completed by December 31st. Mr. Nance proposed that the testing begin December 22. See email correspondence dated from December 14 to 20, 2000, by and between H.E.P., Stone & Webster and Tom Nance discussing Stone & Webster’s request for extended testing attached hereto as Exhibit A.

The temporary pump which had been employed in the earlier testing was currently crated on the dock at Kawaihæ and unavailable for further use at the Hamakua site. The only pump available on such short notice was the pump purchased to become the permanent pump for Well No. 2. Mr. Nance was able to retrieve the meter from the temporary pump for use with the permanent pump for the extended testing.

On December 22, 2000, the permanent pump was installed for testing which ran 12 days until January 3, 2001, due to continuing changes and additions to Stone & Webster’s request. All of the water from this testing was pumped to waste as the pump was not hooked up to the system at the time. See letter dated January 5, 2001, from Tom Nance reporting results of extended testing attached hereto as Exhibit B. As soon as the extended testing was completed, the now-pending pump installation permit application was submitted to the Water Commission on January 9, 2001. The permanent pump was not used again until approximately the first week of March at which point it was attached to the system for permanent use.
Linnel T. Nishioka  
Deputy Director  
August 2, 2001  
Page 3

If I can provide any further information to answer questions you may have, please contact me. Thank you for your assistance and cooperation in this matter.

Very truly yours,

Tim Lui-Kwan

cc:  Tom Nance, Tom Nance Water Resource Engineering  
     William Moore, Roscoe Moss/Beylik Drilling, Inc.  
     Larry Kafchinsky, Hamakua Energy Partners, LP
EXHIBIT A

TWNWRE

From: Larry Katchinski <lkatchinski@hialoha.net>
To: <twnwre@aloa.net>
Sent: Thursday, December 14, 2000 2:03 PM
Subject: FW: Salinity Testing

Tom,
Do you have the 1999 report mentioned below? We need to discuss your availability, capability and price to conduct this test ASAP
Thanks

-----Original Message-----
From: Hickman, Herb [mailto:ghickman@iajones.com]
Sent: Thursday, December 14, 2000 10:30 AM
To: Katchinski, Larry
Cc: DeMars, Claude; Sanders, Ian; 'dgiel@hialoha.net'
Subject: FW: Salinity Testing

Larry,
Here is the Stone & Webster testing requirements. Please forward to
the appropriate testing group. We need a price and expected schedule for
completing the tests. The current testing does not appear to be sufficient
since we are not running both wells at full capacity.
Herb

-----Original Message-----
From: Brian.Gilbertson@swec.com [mailto:Brian.Gilbertson@swec.com]
Sent: Wednesday, December 13, 2000 3:23 PM
To: Hickman, Herb
Cc: linda.cangiato@us.socgen.com; Edwin.Johnson@swec.com
Subject: Re: Salinity Testing

We suggest that the testing procedures should be consistent with those used
by Waimea Water Services as summarized in their February 10, 1999 Well
Completion Report. The duration of the test was five days (7200 minutes). Water
quality and drawdown were sampled with maximum permitted flow (approximately 1150
gpm) at the following intervals (minutes after commencement): 1, 2, 3, 4, 5, 6,
7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700,
800, 900, 1000, 2000, 3000, 4000, 5000, 6000, 7000, and 7200. Water samples
were analyzed by AECOS Laboratory of Hawaii for chlorides as well as a
number of other parameters. I can fax you a copy of the report and laboratory
analyses, if necessary.

12/14/00
Water quality samples from each well should be obtained at the intervals discussed above. Our intent is to compare the results of the Waimea Water Services Well Completion Report with corresponding results from the planned test of the two wells, operating simultaneously for the test duration, to determine if there are comparable trends related to concentrations of chlorides and other parameters that are indicative of increasing salinity. If chloride levels increase throughout the test, we suggest that the sampling frequency be increased and the test be extended until the levels reach a steady state condition.
From: TNWRE <tnwre@flex.com>
To: <brian.gilbertson@swec.com>
Sent: Tuesday, December 19, 2000 11:23 AM
Subject: Salinity Testing

Your Dec. 13 email to Herb Hickman regarding pump testing both wells concurrently was forwarded to me. Please call me to discuss. I can also provide information on the recently completed test of Well 2. (808-637-1141).

Sincerely,
Tom Nance
Fax To: Larry Kachelinski (775-1801)
From: Tom Morse

Latest from Brian Gilbertson, who keeps ding-dong-bussing. We can base the test run longer, but your staff will need to continue for 12-hour sample and flume monitoring. Please call (537-1141) to discuss.

Page 1 of 1

TNWRE

From: <Brian.Gilbertson@swec.com>
To: TNWRE <tnwre@flex.com>
Cc: Sanders, Ian <isanders@ajones.com>; <linda.cangianc@us.socgen.com>;
    <Edwin.Johnson@swec.com>
Sent: Friday, December 22, 2000 7:10 AM
Subject: Re: Salinity Testing

Your fax of December 20th proposes that the salinity test commence on December 22nd and run for a one week period until December 29th. The duration was determined in order to provide data regarding the water resource prior to planned financial closing on December 31st. Since it now appears unlikely that testing and other prerequisites to closing by December 31st will be completed, I suggest that the salinity test may be extended beyond December 29th, if necessary, to obtain more conclusive results.
MEMORANDUM

TO: Larry Katchinski - Hamakua Energy Partners
FROM: Tom Nance
SUBJECT: Extended Pump Test of Well Nos. 1 and 2

At the request of the Stone & Webster, an extended pump test with Well Nos. 1 and 2 running concurrently was conducted. As identified herein, Well 1 refers to the first well completed and Well 2 is the recently completed second well. The test was run for 12 days, starting at 10:35 a.m. on December 22, 2000 and ending at 10:45 a.m. on January 3, 2001. To accommodate the power plant's operating requirements, the test was run in the following manner:

- Well No. 1 had already been running and continued to provide the plant’s supply requirements throughout the test.
- Using its permanent pump, Well No. 2 was run for 12 days with its discharge directed into a perimeter drainage ditch.
- Water level and conductivity recorders were installed on both wells to provide a continuous record of trends in salinity.
- At 12-hour intervals, plant operating personnel collected samples and recorded the instantaneous pumping rates and flowmeter totalizer values at each well.

**Pumping Rates.** Over the 12-day test, the flowrate on Well No. 1 varied in abrupt steps from 225 to 250 GPM on the low end and at 450 GPM on the high end. Over the 12-day period, it averaged 373 GPM. Well No. 2 ran at an essentially constant rate of 890 to 900 GPM against the modest above-ground head of its discharge hose. Its 12-day average flowrate was 893 GPM.

**Recorded Water Level.** Unvented pressure transducer-data loggers were inserted in both wells shortly before the start of the pump test on December 22nd and retrieved shortly following the end of the test on January 3rd. Water level was recorded at 5-minute intervals. The level in Well No. 1 (on Figure 1) shows abrupt changes in water level in response to the abrupt changes in pumping rates. These changes are superimposed over the tidal variation of the basal lens the well taps. There is also a "noise" in the recorded level due to downhole vibration of the pump.
Memo to: Larry Kaichinski  
January 5, 2001 — 00/010  
Page two  

The recorded water level for Well 2 is shown on Figure 2. With its essentially constant pumping rate, a "smoother" water level record with a clearer depiction of the tidal influence was obtained. At about 900 GPM, drawdown in the well was about 1.7 feet.

Conductivity of the Pumped Water. Conductivity of both wells was recorded at 5-minute intervals and was also measured for discrete samples taken at 12-hour intervals. Both measures of conductivity for Well 1 are shown on Figure 3 (the discrete sample results are also listed in Exhibit 1). This particular conductivity recorder behaved somewhat erratically through the first six days of the test and somewhat better thereafter. For this well, conductivity of the discrete samples provide a more reliable record. These show a slight rise from about 735 µmhos at the start of the test to about 790 µmhos at the end. This well had been operated continuously for several months prior to the test, presumably achieving a stable salinity. Based on this, it appears that the modest increase during the 12-day test is attributable to the concurrent operation of Well No. 2.

Recorded and discrete sample conductivity of the water pumped by Well No. 2 is shown on Figure 4. There was a significant increase through the test, starting at about 440 µmhos and ending at about 990 µmhos. On this linear presentation of the data, it appears that the conductivity was asymptotically approaching a level of about 1100 µmhos. On a semi-log plot (Figure 5), it appears that 1100 µmhos might be reached in about 45,000 to 60,000 minutes (30 to 35 days) of continuous pumping at about 900 GPM.

Chloride Concentrations. Chloride concentrations of the samples taken at 12-hour intervals are compiled in Exhibit 1. Since saltwater intrusion into the basal lens is the reason for the salinity rise during the pump test, the trends in chlorides are essentially identical to the trends in conductivity discussed above.

cc: Brian Gilbertson - Stone & Webster  
John Pierce - Jones/Burns & McDonnell  

Attachments
TO: Honorable Bruce S. Anderson, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch

FROM: Gilbert S. Coloma-Agaran, Chairperson
   Commission on Water Resource Management

SUBJECT: After-The-Fact Pump Installation Permit Application
   Enserch Well No. 1 (Well No. 6528-02)

Transmitted for your review and comment is a copy of the captioned well 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 January 28, 2001.

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.

Rk:ky
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.

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 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 wellsite
(information attached).

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

No comments/objections.

Contact Person: Lori N. Kajiwara
   Phone: 5864294

Signed: Lori N. Kajiwara
   Date: 2-27-2001
TO:        Honorable Bruce S. Anderson, Director  
           Department of Health  
           Attention: Dennis Tulang, Wastewater Branch  
                        William Wong, Safe Drinking Water Branch

FROM:      Gilbert S. Coloma-Agaran, Chairperson
           Commission on Water Resource Management

SUBJECT:   After-The-Fact Pump Installation Permit Application
           Enserch Well No. 1 (Well No. 6528-02)

Transmitted for your review and comment is a copy of the captioned well 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 January 26, 2001.

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.

Risky
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 having 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, §11-20-26.

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 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 [111] 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: William J. Hoffman  
                 Phone: 586-4268

Signed: William J. Hoffman  
        Date: 01/19/01
TO: Dean Y. Uchida, Administrator  
Land Division

FROM: Linnel T. Nishioka, Deputy Director  
Commission on Water Resource Management

SUBJECT: After-The-Fact Pump Installation Permit Application  
Enserch Well No. 1 (Well No. 6528-02)

Transmitted for your review and comment is a copy of the captioned well application which includes a request for a pump installation permit.

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 January 26, 2001.

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.

Rf:ky  
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

kk Other comments: Original source of private title is Grant 2160 issued on October 29, 1853.

Contact Person: Gary Martin  
Phone: 587-0421

Signed: Gary Martin  
Date: 1/16/01
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT
10-20-00
99-92

For Official Use Only:

□ Well Construction and/or □ Pump Installation

APPLICATION INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) □ WELL OWNER: Hamakua Energy Partners Contact Person: Larry Kafchinski Phone: 808-775-1711
Mailing Address: P.O. Box 40, Honokaa, Hawaii 96727
E-mail: Fax 808-775-1414
(b) □ LAND OWNER: Enserch琼斯-Hamakua Contact Person: Larry Kafchinski
Mailing Address: P.O. Box 40, Honokaa, Hawaii 96727
E-mail: Fax 808-775-1711
808-775-1414
(c) □ CONTRACTOR: Roscoe Moss Hawaii Contact Person: Bill Moore Phone: 808-5654
Mailing Address: 91-259-A Olal Street Kapolei, Hawaii 96707
E-mail: Fax 808-5860
License No. AC-21096
(circle one: C-57, C-57a, or A)

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

2. WELL NAME: Enserch Well No. 1 Address: 45-300 Lehua Street, Honokaa, Hawaii 96727
Hawaii
Island:
Tax Map Key: 4 - 5 - 62 - 56
Zone: Sea Plat Parcel

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

*State Well No.: 6528-02 (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: See Remarks Below)

5. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 600 gallons per minute

Pump Type (check one):
☐ Deep Well Turbine
☐ Rotary
☐ Submersible (100 HP)
☐ Rotary-Displacement
☐ Centrifugal
☐ Rotary-Gear
☐ Impulse

6. PROPOSED USE: (check all that apply)
☐ Municipal (including hotels, stores, etc.)
☐ Industrial (Power Plant Cooling)
☐ Domestic (individual, noncommercial water system)
☐ No. of Dwelling Units:
☐ Irrigation (crop)
☐ No. of Acres:
☐ Military
☐ Other (explain):

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: Up to 864,000 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:
Wells 1 and 2 (Nos. 6528-02 & 03) will be outfitted with 600 GPM pumps and operated concurrently to supply the power plant.

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 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.

Well Owner Signature: Hamakua Energy Partners Landowner Signature: Enserch琼斯-Hamakua Contractor Signature: Roscoe Moss Hawaii
Date: 10/20/00 Date: 10/24/00 Date: 10/24/00

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

WCPIPA FORM 5/2/00
10. PROPOSED WELL SECTION

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

Solid Casing: (90% x (Ground Elev. - Water Level Elev.))
- Total Length: 446 ft.
- Nominal Diameter: 14 in.
- Wall Thickness: 0.375 in.
- Bottom Elevation: 0 ft.

Open Casing: [ ] Perforated [ ] Screen
- Total Length: 40 ft.
- Nominal Diameter: 14 in.
- Wall Thickness: 0.3125 in.
- Bottom Elevation: -40 ft.

*Note: Neither bentonite nor mud should be used in saturated zone during drilling.*

**Estimated Water Level Elevation:**
- Variates with the Tide
- 3.5 ft to 4.3 ft

**Cement Grout:**
- 402 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 in):**
- 3 in.

**Rock or Gravel Packing:**
- None
- [ ] Crushed Basalt
- [ ] Rounded Gravel

**Total Depth:**
- 494 ft

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 Elevation) / 4**

Example: Estimated + 2 ft Water Level Elev. → Bottom Elevation of Well Limit = \( \frac{2 - \frac{0.25 \times 2}{4}}{4} \) = -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 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 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 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)
- 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 D3296

**Hole Diameter:**
- 20 in.

**Minimum of 2" Radius & 4" Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.)**
- 444 ft.
Walmea Water Services Inc.  Enserch Well #1

Section of As-Built Well

not to scale  Nov 98

WELL CROSS SECTION DIAGRAM

Enserch Well Report  Page # 10
Mr. Larry Kafchinski  
Hamakua Energy Partners  
P.O. Box 40  
Honokaa, HI 96727  

Dear Mr. Kafchinski:

After-the-fact Pump Installation Permit Application for Well No. 6528-02

We have received your After-the-fact Pump Installation permit application and filing fee for the Enserch No. 1 Well (Well No. 6528-02). However, your application is incomplete. Matters which must be addressed before we accept your application as complete are as follows:

1. Please fill in the attached Well Completion Report Part II.

Upon receipt of the above information we will accept your application as complete and you can then expect your application to be processed within ninety (90) days.

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, extension 70255.

Sincerely,

LINNEL T. NISHIOKA  
Deputy Director

RI:ss  
Attachment  
c:  Tom Nance Water Resource Engineering
Pay: **Twenty-five and 00/100** DOLLARS $25.00

TO THE ORDER OF: Department of Land & Natural Resources

Date: October 25, 2000

DETACH AND RETAIN THIS STATEMENT
DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.
IF NOT CORRECT, PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

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<th>DATE</th>
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<td>ATF PIP Appl.</td>
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DEPARTMENT OF LAND AND NATURAL RESOURCES

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TOTAL: $50.00

RKS: LINE (1) WC/PIP Appl. for Well No. 6047-04
     LINE (2) ATF PIP Appl. for Well No. 6528-02
     LINE (3)
     LINE (4)
Ms. Linnel T. Nishioka - Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Nishioka:

Pump Installation Permit Application for
ENSERCH Well No. 1 (No. 6528-02)
Honokaa, Hawaii

On behalf of Hamakua Energy Partners, I am pleased to submit the accompanying (after the fact) Pump Installation Permit Application and $25.00 filing fee for ENSERCH Well No. 1 (No. 6528-02) located at 45-300 Lehua Street on TMK 4-5-02:56 in Honokaa, Hawaii. In the transition between drilling companies and consultants from the first to second well, this application was not prepared in a timely manner. The 600 GPM submersible pump has already been installed in the well.

If you have any questions or need additional information, please call John Pierce (808-775-1711) or me. Thank you for your attention to this matter.

Sincerely,

Tom Nance

cc: John Pierce - Jones/Burns & McDonnell

Attachments
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

10-20-00
99-92

For Official Use Only: 

 underline text

P: 3: 2

APPLICANT INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) WELL OWNER: Hamauk Energy Partners
   Mailing Address: P.O. Box 40
   Contact Person: Larry Kafchinski
   Phone: 808-775-1711
   Fax: 808-775-1414
   E-mail:

2. LAND OWNER: ENSERCH/Jones-Hamakua
   Mailing Address: P.O. Box 40
   Contact Person: Larry Kafchinski
   Phone: 808-775-1711
   Fax: 808-775-1414
   E-mail:

3. CONTRACTOR: Roscoe Moss Hawaii
   Mailing Address: 91-259-A Olai Street
   Contact Person: Bill Moore
   Phone: 682-5654
   Fax: 822-5566
   E-mail:
   License No. AC-21866
   (circle one: C-57, C-57a, or A )

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

2. WELL NAME: ENSERCH Well No. 1
   Island: Hawaii
   Address: 45-300 Lehua Street
   Contact Person: Larry Kafchinski
   Phone: 808-775-1711
   Fax: 808-775-1414
   E-mail:

3. PROPOSED WORK: (check all that apply)
   - Install New Pump*
   - Modify Existing Well*
   - Modify Pump*
   - Abandon/Seal*
   - Drilled
   - Dug
   - Shaft
   - Tunnel
   - Is this well part of a battery of wells? Yes
   - No
   - (Please describe: See Remarks Below)

4. CONSTRUCTION:
   - Pump Type (check one):
     - Deep Well Turbine
     - Submersible (100 HP)
     - Centrifugal
     - Rotary
     - Rotary-Displacement
     - Rotary-Gear
     - Propeller
     - Reciprocating
     - Impulse
     - Industrial (Power Plant Cooling)
     - No. of Dwelling Units:
     - No. of Acres:
     - Other (explain):

5. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 600 gallons per minute

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

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: Up to 664,000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT: Flowmeter

OTHER IMPORTANT INFORMATION:

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

9. REMARKS, EXPLANATIONS:
   Wells 1 and 2 (Nos. 6528-02 & 03) will be outfitted with 600 GPM pumps and operated concurrently to supply the power plant.

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 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 cumulative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner
Signature
Date

Landowner
Signature
Date

Contractor
Signature
Date

For official use only

Latitude

Aquifer System No.

Longitude

State Well No.

WCPipa FORM 5/2000
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

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))
- Total Length: 446 ft.
- Nominal Diameter: 14 in.
- Wall Thickness: 0.375 in.
- Bottom Elevation: 0 ft., msl*

Open Casing: [Perforated] [Screen]
- Total Length: 40 ft.
- Nominal Diameter: 14 in.
- Wall Thickness: 0.3125 in.
- Bottom Elevation: -40 ft., msl*

Note: Neither bentonite nor mud should be used in saturated zone during drilling.

Open Hole:
- Length: 4 ft.
- Diameter: 20 in.
- Bottom Elevation: -44 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 = \( \frac{4}{4} \times \text{Water Elevation} - 44 \) ft.

Example: Estimated + 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = \( 4 - \frac{44}{4} \times 2 \) 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)
- 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 D3617
  - 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)
- 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 D3617
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3296
From: <spatterson@ectinc.com>  
To: <picarpinone@tecoenergy.com>  
Date: 2/9/00 9:53AM  
Subject: Hamakua well permits

Paul:

I spoke with Ryan Imata at the Hawaii Commission on Water Resources Management. The applications for permits you have submitted went to Ryan.

Well No. 1  
Ryan said that the pump installation permit for well number 1 is valid until March 29, 2001, so you are in good shape for well number 1 from a permit standpoint. No other permits concerning the well are required. The attached Table 1 summarizes the permit status.

Well No. 2  
Ryan said he had received the well construction permit and everything was in order. I asked him about the pump installation permit. All information for the pump installation permit is contained in the well construction permit, so I asked him if we really needed to submit another permit application for pump installation. He said no that he would simply check the appropriate box on the construction permit and it would then be an application for both construction and pump installation. In addition, you do not need a water use permit because there are no water management areas on the Big Island of Hawaii. You do not need to file well registrations because Ryan said that the registration process was intended for wells that were installed prior to the establishment of the water commission. Therefore, you are in good shape from a permit standpoint on both wells. Ryan said the construction and pump installation permit application should be processed within 90 days of the December 1999 submittal date. The submittal dates for installation reports and water quality reports must be closely watched to make sure they go in on time. The due dates may be set in the permit approval letter or otherwise the dates are as per the regulations (see attached table).

Please contact Vilma or me if you have any questions concerning the attached table.

Sam Patterson

CC: <vbrueggemeyer@ectinc.com>
<table>
<thead>
<tr>
<th>HAMAKUA</th>
<th>Well No. 1 (state No. 6528-02)</th>
<th>Well 1 Comments</th>
<th>Well No. 2</th>
<th>Well 2 Comments</th>
<th>Action Item</th>
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<tr>
<td>Well Construction Permit</td>
<td>YES</td>
<td>APPROVED June 1996</td>
<td>SUBMITTED</td>
<td>Submitted December 14, 1999</td>
<td>Ryan Imata reports that the maps arrived on January 10, 2000 but that should not hold up the permit. The usual time is 90 days.</td>
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<tr>
<td>Install well</td>
<td>YES</td>
<td>Completed August 1996</td>
<td>Not yet</td>
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<tr>
<td>Aquifer Test</td>
<td>YES</td>
<td>August 1996 Step down, October 1998 Continuous</td>
<td>Not yet</td>
<td></td>
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</tr>
<tr>
<td>Well Completion Report</td>
<td>YES</td>
<td>Submitted November 1996</td>
<td>Not yet</td>
<td>Must be submitted within 30 days of well completion. A special condition was granted for well No. 1 that gave 60 days to complete the report</td>
<td></td>
</tr>
<tr>
<td>Pump Installation Permit</td>
<td>YES</td>
<td>Must be submitted within 30 days of testing</td>
<td>SUBMITTED</td>
<td>Submitted with the well construction permit</td>
<td></td>
</tr>
<tr>
<td>Pump Installation report</td>
<td>Not yet</td>
<td>Must be submitted within 60 days of pump installation</td>
<td>Not yet</td>
<td>Must be submitted within 60 days of pump installation</td>
<td>Reference Hawaii Well Construction and Pump Installation Standards</td>
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<tr>
<td>Water Quality Report</td>
<td>YES</td>
<td>Submitted November 1996</td>
<td>Not yet</td>
<td>Must be submitted within 60 days of sampling during pump test</td>
<td>Chapter 174C-83 State Water Code.</td>
</tr>
<tr>
<td>Well Registration</td>
<td>NA</td>
<td>RE Chapter 174C-83 State Water Code. Any person owning operating a well shall register the well with the commission.</td>
<td>NA</td>
<td>RE Chapter 174C-83 State Water Code. Any person owning operating a well shall register the well with the commission.</td>
<td>Ryan Imata at Water Commission said this did not apply. This was for wells installed before the commission was established</td>
</tr>
<tr>
<td>Water Use Permit</td>
<td>NA</td>
<td></td>
<td>NA</td>
<td>According to Ryan Imata (Commission on Water Resources management) there are no water management areas on the Big Island of Hawaii.</td>
<td></td>
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</tbody>
</table>
Table 1: Hamakua Well Construction & Pump Installation Permit Status
1. **Pump Tests Check**  Glenn Bauer □ (initial)  
   - Step–Drawdown Test:  
     - acceptable  □  □  
     - followed WCPI Stds  □  □  
     - analysis attached  □  □  
     - proposed pump cap o.k.  □  □  
   - Aquifer Pump Test:  
     - acceptable  □  □  
     - followed WCPI Stds  □  □  
     - T & S analysis attached  □  □  
   - Well Interference:  
     - estimated Steady-State  
       - drawdown at 1-mile radius is _________ ft.  □  □  
       - analysis attached  □  □  
   - Stream Surface Water Impacted:  □ □ ← If yes, identify most probable stream

2. **Construction Check**  Mitch Ohye □ (initial)  
   - data complete  □  □  
   - followed WCPI Stds  □  □ 
   - wellphys.dbf updated  □  □  
   - welaplic.dbf updated  □  □  

---

The only deficiency is the ASB DSNF was in the ASB holding section (3811). (See below)
Enserch Well #1
Section of As-Built Well
not to scale Nov 98

WELL CROSS SECTION DIAGRAM
March 22, 1999

Mr. Tim Johns, Chairperson
Commission Water Resource Management
Dept. of Land & Natural Resources
P.O. Box 621
Honolulu, HI 96809

Attn: Mr. Ed Sakoda

Dear Ed:

Please find enclosed Well Completion Report fully signed.

If you have any questions, please feel free to call us at (808) 885-5941.

Mahalo,

Steve Bowles

Enclosure
WELL COMPLETION REPORT

1. State Well No.: 6528-02  Well Name: Enserch Well # 1  Island: Hawaii
2. Location/Address: HONOKAA, HAWAII  Tax Map Key: 3-4-5-02:23

PART I. WELL CONSTRUCTION REPORT

3. Drilling Company: WAI'ELE DRILLING & DEVELOPMENT
4. Name of driller who performed work: TOM HELFRICH
5. Type of rig/construction: ROTARY

6. Date(s) well construction and pump tests (if any) completed: 11/30/98
7. GROUND ELEVATION (referenced to mean sea level, msl): 445.5 ft.
   Well Bench Mark (description/location): punch mark on casing  Elevation(msl): 445.5 ft.

8. DRILLER'S LOG: Please attach geologic log (if available or if required by permit)
   Depths (ft)  Rock Description, Water Level, Dates, etc.  Depths (ft)  Rock Description, Water Level, Dates, etc.
   0 to 66  Hard  180 to 362  Rock Description, Water Level, Dates, etc.  362 to 486  Hard
   66 to 180  Mixed soft layers

9. Total depth of well below ground: 486 ft.
10. Hole size: 20 inch dia. from 0 ft. to 486 ft. below ground
   ____________________________________________________
   0 ft. to 362 ft. below ground
   362 ft. to 486 ft. below ground

11. Casing installed: 14 in. I.D. x 375 in. wall solid section to 446 ft. below ground
    14 in. I.D. x 312 in. wall perforated section to 486 ft. below ground

12. Annulus: Grouted from 0 ft. below ground to 392 ft. below ground
    Gravel packed from 392 ft. below ground to 402 ft. below ground

13. Initial water level: 442.04 ft. below ground.  Date and time of measurement: 5/5/98 10am
14. Initial chloride: 145 ppm  Date and time of sampling: 8/20/98 12 pm
15. Initial temperature: 69.62 °F  Date and time of measurement: 10/14/98 10 am

    (1) Step-Drawdown Test Date 9/15/98
       Start water level 442 ft. below R.P.
       End water level 442 ft. below R.P.
    (2) Long-term Aquifer Test Date 10/14/98
       Start water level 442 ft. below R.P.
       End water level 442 ft. below R.P.

17. Aquifer Pump Test Procedures data & graphs (1/99 LTAT Form) attached? X Yes _No
18. As-built drawings attached? _Yes _No
19. Other remarks/comments: (Or back of this form)

Well Drilling Contractor: WAI'ELE DRILLING  C-57 Lic. No. C-16543
Signature: ___________________________  Date: 12/15/98

Surveyor (print): DONALD JAMES MURRAY  Lic. No. 5 12-S-7
Signature: ___________________________  Date: 1/2/99

Applicant (print): Enserch Development Corporation, Hawaii, Inc.  Allen V. Smith  Vice President
Signature: ___________________________  Date: 2/5/99
PART II. (PERMANENT) PUMP INSTALLATION REPORT

20. Pump Installation Company: ____________________________

21. Name of person performing work: ____________________________

22. Date Pump Installation Completed: ____________________________

23. PUMP INSTALLATION:
   Pump Type, Make, Serial No.: ____________________________ Capacity: ________ gpm
   Motor type, H.P., Voltage, rpm: ____________________________
   Depth of Pump Intake Setting ________ ft. below ________, which elevation is ________ ft.
   Depth to bottom of airline ________ ft. below ________, which elevation is ________ ft.
   Pumping Head is ________ ft. Type of flow meter: ____________________________ which measures in ________

24. As-built drawings attached: ____________________________ Yes __ No

25. Other remarks/comments: (See below)

Pump Installation Contractor (print) ____________________________ C-57 Lic. No. ____________________________

Signature ____________________________ Date ____________________________

Applicant (print) ____________________________

Signature ____________________________ Date ____________________________

8. (cont'd) DRILLER'S LOG (cont'd):

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Water Level Dates | Depth (ft.) | Rock Description, Remarks |
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</table>

19. & 25. Remarks:

________________________________________________________________________

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________________________________________________________________________

TO: Commission on Water Resource Management

FROM: Steve Bowles

DATE: March 26, 1999

SUBJECT: Revised Well Completion Report

We have enclosed two copies of the revised Enserch Well #1 Well Completion Report dated March 15, 1999, for your review and files. Please discard the previous reports sent to you earlier.

If you have any questions, please feel free to call me.

Thank you.

cc: Jody Allione
    Frank Meyers / Randy Tipton
ENGERCH WELL #1
WELL COMPLETION REPORT

State Well No. 6528-02

November 1998
Revised on 9 Feb 99
Revised on 15 March 99

Prepared by Waimea Water Services Inc.
for
Encogen Hawaii, LP
ENERCH WELL #1
WELL COMPLETION REPORT
State Well No.6528-02

WELL CONSTRUCTION, PERMITS

The Enserch Well #1 (State Well No. 6528-02) was permitted by the State of Hawaii, Commission on Water Resource Management in 4 March 97 (copy attached).

WELL CONSTRUCTION, PLANS

Plans and specifications were reviewed and approved by Jody Allione of Encogen, Hawaii, LP. The well location was determined in conjunction with the Encogen engineering staff. The location maps showing the well location and siting are included along with an overall map showing the relationship to the surrounding area.

WELL CONSTRUCTION, SUMMARY

The Well construction contracts were signed 23 June 98 with Wai'eli Drilling and Development. The Notice to Proceed was effective 23 June 98. Well work began on 25 June 98. The first hole was abandoned and grouted due to lost tools in the hole. A new hole was started on 28 July 98, 10' east of the first hole. The pilot hole (12.75") was completed on 4 Aug 98 to a depth of 486 feet. The water level stood at 3.53' above msl.

The pilot hole was reamed to 18" diameter and was completed on 13 Aug 98.

A pumping test of the well was done in two stages. The first test was conducted at a flow rate of 700 gpm, resulting in a drawdown of 1.2' with a chloride content of 145 to 155 mg/l. The open hole was then tested at 500 gpm and 850 gpm. The drawdown at 500 gpm was 0.8', with the chloride content rising from 115 mg/l to stabilize at about 150 mg/l. At 850 gpm, the chlorides rose to 150 mg/l and the drawdown was 1.6'.

A larger pump was installed and a pumping test was run at an average rate of 1043 gpm with a drawdown of 2.8 feet (9-12 Sep 98). The chlorides reached 160 mg/l and the TDS was 335 mg/l. A total of 4,568,340 gallons were pumped. The data and graphs from this
PUMPING TEST - LONG TERM TEST

A long-term aquifer-pumping test at an average rate of 1043 gpm commenced at 9:16 am on 14 Oct 98. Water levels were continuously recorded at the pumping well using an air line system. In addition, a down hole recording system was operated. The pumping water level data after 5 days (7,200 minutes) resulted in a final drawdown in the pumping well of 2.8 feet. The data and graphical representations are attached. Following a recovery period of 3.0 minutes the water level at the Enserch well returned to a static level of +4.27'.
### Long Term Test

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<th>Time (Min)</th>
<th>W.L. R.</th>
<th>W.L. R.</th>
<th>Chlorides</th>
<th>Drawdown 8:30</th>
<th>Drawdown 7:35</th>
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</table>

### Final Pumping Test – Average Rate was 1043 Ave. gpm

**Water Level and Chlorides**

**Pumping Test Data and Graphs**

Waimea Water Services Inc established benchmarks on the well head (measuring points).

Ensearch Well Report  Page # 5
QUALITY TESTING

Water quality samples were taken from the pumping well at the end of the pumping test (Monday, 19 Oct 98) by AECOS Laboratories. Preliminary water quality analyses were performed covering critical parameters as required by the owner.

Analyzed for: Color, TSS, pH, hardness, turbidity, Carbon Dioxide, Nitrogen as Nitrate, Nitrogen as Nitrite, Residual Chlorine, Alkalinity, Total Metals, Sulfate, Total and Dissolved Silica, Total Phosphorous, Chemical Oxygen Demand, Total Organic Carbon, Calcium, Mg, Na, Sulfate, Chloride as CACO3, Cation Sum and Anion Sum, aluminum, barium, calcium, iron, magnesium, potassium, sodium, and strontium (data attached).
# DATA SUMMARY

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<th>Description</th>
<th>Value</th>
<th>Unit</th>
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<tr>
<td>Non-pumping Water Level</td>
<td>+4.27'</td>
<td>Elevation</td>
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<tr>
<td></td>
<td>440.94'</td>
<td>Depth to water</td>
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<tr>
<td>Drawdown - Water Level</td>
<td>+1.5'</td>
<td>Draw down at the end of 7,200 minutes of pumping.</td>
</tr>
<tr>
<td>Ground Elevation</td>
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<td>Pumping Rate (average)</td>
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<td>gpm</td>
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<td>Temperature</td>
<td>20.9</td>
<td>Fahrenheit</td>
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<tr>
<td>Chlorides</td>
<td>160</td>
<td>mg/l (field)</td>
</tr>
<tr>
<td>Electrical Conductance</td>
<td>703</td>
<td>microsiemens</td>
</tr>
<tr>
<td>Total pumpage as of 5 days</td>
<td>7,515,000</td>
<td>gallons</td>
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<tr>
<td>(7,200 minutes)</td>
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</table>
CONCLUSIONS

Based on the data obtained from the pumping tests, it appears that:

1. The aquifer system is capable of producing and sustaining the water requirements of 1,656,000 gallons per day (average day).

2. The Enserch Well #1 is capable of reliably producing at the design rate of 1150 gpm on a long-term production basis, however the test results indicate a rising salinity.

3. The water quality tests, based on results of the laboratory analyses, indicate that the groundwater quality at the end of the long-term test was excellent. The owner, based on its power generation needs, will determine quality issues.

4. The rising salinity at a constant pumping rate of 1043 gpm indicates that this rate of pumping is causing a significant adjustment of the basal lens. To illustrate this behavior, a graphic analysis (below) was prepared. As can be seen, the salinity increases as a function of the volume pumped under constant pumping. It is not known at this time how the well will actually be pumped.

![Enserch Well Pumping Test Oct. 98 Chlorides vs Gallons Pumped](image)

Water Volume and Chlorides Pumping Test Data and Graphs
5. Assuming an average water level head of 4', it is calculated that sea water salinity (about 20,000 mg/l chlorides) will be found at a depth below sea level of about 160 feet. The calculation assumes that the lens is in dynamic equilibrium and that, for every 1 foot of head above sea level, there will be 40 feet of fresh water below sea level. The record showing the extent of tidal influence (attached, page 13) indicated that the daily range of tide fluctuation is about 0.7 feet in double amplitude. This will likely cause a transition zone, between fresh (less than 250 mg/l chlorides) and salt water, of about 28 feet (0.7 fluctuation x 40').

It is reasonable to also assume that the seasonal variation in recharge will be on the order of 1 foot, thus expanding the transition zone by an additional 40', making a total transition zone thickness of about 70' (28' + 40').

Assuming the theoretical lens thickness is 164' (40' x 4' + 4'), the distance between the bottom of the well (-46') and the top of the transition zone (250 mg/l chlorides or greater) will be about 50' (164' total thickness, less 70 feet of transition zone, less 44' (4' of head + 40' of bore below sea level)) under non pumping conditions. This may result in rapid salt-water encroachment at a sustained pumping rate of 1150 gpm, as implied by the pumping test.

There is no absolute way of predicting the rate of salt-water encroachment, which may result short of actual operating experience. A projection of the salinity increase during the testing indicates that critical levels of salinity might occur within a year or so. Regardless, it is recommended that the supply of 1150 gpm be provided from 2 wells at 575 gpm each. This would provide a more reliable supply in terms of quality.
Enserch Well #1
Section of As-Built Well

WELL CROSS SECTION DIAGRAM

Waimea Water Services Inc.

not to scale

Enserch Well Report Page # 10

Enserch Well #1
Section of As-Built Well

WELL CROSS SECTION DIAGRAM

Waimea Water Services Inc.
WELL PERMITS
(Attached)
WELL CONSTRUCTION PERMIT

PERMIT NO. 67782-89

Date of Application: March 1, 1987
Expiration Date: March 1, 1988

I, the undersigned, do hereby certify that I am the owner of the property described in the Permit and that I have read and understand the terms and conditions of the Permit.

Owner's Signature: [Signature]
Printed Name: [Name]

Permit Issued by: [Authority]

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

Attachment: [Number]

[Address]

[Date: 3/25/97]

[Signature]

[Name]

Partner

[Address]

[Date: 12/18/98]

[Signature]

[Name]

Firm or Title: [Firm or Title]

Partner

[Address]
WATER LEVEL AND TIDE INFORMATION

Levelogger dataprocessing v3.2 (c) 1996 Solinst

Location: Enserch #1  Instr.nr.: 01-03730  1... f15  Date/time: 21 Aug 1998  16:23:2
Ch.1: open hole-depth 486  Master level: -6.00 [ft]  Min: 0.00 [ft]  Max: 8.40 [ft]

Record of Water Levels on 14 Aug – 17 Aug 98 and Tides

Enserch Well Report  Page # 13
PLUMBNESS AND ALIGNMENT TEST
(Attached)
### ENSELWELL #1

**WELL ALIGNMENT DATA**  
\[ \text{Drift} = \text{Deflection} \times \frac{\text{height} + \text{depth}}{\text{height}} \]

**CASING TO PULLEY =**  
- Open Hole =  
- CAGE USED

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<th>EAST</th>
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Enserch Well Plumbness Survey; East Drift; 22 Oct 98

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Alignment in Inches

Depth in Feet
WATER QUALITY DATA (Attached)
Aloha Steve,

Following are the results of the 10/19/98 sampling at Honakaa-Enserch Power Plant:

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CLIENT: Waimea Water Services

Location: Honokaa-Enserch Power Plant

CALCULATIONS TO REPORT DATA AS CaCO3

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ADDITIONAL ANALYTES

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Karen Klein, Director
TO: Commission on Water Resource Management
FROM: Steve Bowles
DATE: February 10, 1999
SUBJ: WELL COMPLETION REPORT

A copy of the Well Completion Report was sent to you for your files. Please find enclosed one copy of the revised Enserch Well #1 Well Completion Report for your review and files. Please discard of the previous report sent. Additional test data was added. Should you have any questions, please feel free to call me.

Thank you.

cc: Jody Allione
    Frank Meyers/Randy Tipton
ENCHWELL #1
WELL COMPLETION REPORT

State Well No. 6528-02

November 1998
Revised on 9 Feb 99

Prepared by Waimea Water Services Inc.
for
Encogen Hawaii, LP

Enserch Well Report
WELL CONSTRUCTION, PERMITS

The Enserch Well #1 (State Well No. 6528-02) was permitted by the State of Hawaii, Commission on Water Resource Management in 4 March 97 (copy attached).

WELL CONSTRUCTION, PLANS

Plans and specifications were reviewed and approved by Jody Allione of Encogen, Hawaii, LP. The well location was determined in conjunction with the Encogen engineering staff. The location maps showing the well location and siting are included along with an overall map showing the relationship to the surrounding area.

WELL CONSTRUCTION, SUMMARY

The Well construction contracts were signed 23 June 98 with Wai'eli Drilling and Development. The Notice to Proceed was effective 23 June 98. Well work began on 25 June 98. The first hole was abandoned and grouted due to lost tools in the hole. A new hole was started on 28 July 98, 10' east of the first hole. The pilot hole (12.75") was completed on 4 Aug 98 to a depth of 486 feet. The water level stood at 3.53' above msl.

The pilot hole was reamed to 18" diameter and was completed on 13 Aug 98.

A pumping test of the well was done in two stages. The first test was conducted at a flow rate of 700 gpm, resulting in a drawdown of 1.2' with a chloride content of 145 to 155 mg/l. The open hole was then tested at 500 gpm and 850 gpm. The drawdown at 500 gpm was 0.8', with the chloride content rising from 115 mg/l to stabilize at about 150 mg/l. At 850 gpm, the chlorides rose to 150 mg/l and the drawdown was 1.6'.

A larger pump was installed and a pumping test was run at an average rate of 1043 gpm with a drawdown of 2.8 feet (15 Sep 98). The chlorides reached 160 mg/l and the TDS was 335 mg/l. The data and graphs from this testing are shown below.
Based on the pumping tests, the well was reamed to 22" to accept a 14" casing. Casing and grouting of the annular space around the well casing section was completed by October 1998.

A final pumping test was run from 14 Oct 98 to 19 Oct 98. Water quality samples were taken on Monday morning, 19 Oct 98.
An As-built section drawing of the well is attached.

Plumbness and alignment tests were conducted on 22 Oct 98 (see attached report). A 40-foot long dummy having an outside diameter of 13.5 inches passed freely down the cased well. A cage traverse of the cased well was also performed. The results of the two tests showed that the well met the specifications for each 100’ and did not vary in excess of more than two-thirds the smallest inside diameter for any 100-foot interval (data attached).

PUMPING TEST - SPECIFIC CAPACITY

The series of tests conducted were considered adequate to project the specific capacity of the well, even though they were performed in the uncased well. The open hole tests resulted in the following drawdowns. The graph below shows the data and results.
PUMPING TEST - LONG TERM TEST

A long-term aquifer-pumping test at a rate of 1043 commenced at 9:16 am on 14 Oct 98. Water levels were continuously recorded at the pumping well using an air line system. In addition, a down hole recording system was operated. The pumping water level data after 5 days (7,200 minutes) resulted in a final drawdown in the pumping well of 2.8 feet. The data and graphical representations are attached. Following a recovery period of 3.0 minutes the water level at the Enserch well returned to a static level of +4.27'.
### Breach Well Pumping Test from 14-Oct-98

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**Final Pumping Test** – Average Rate was 1150 gpm

**Water Level and Chlorides**

**Pumping Test Data and Graphs**

Waimea Water Services Inc established benchmarks on the well head (measuring points).
QUALITY TESTING

Water quality samples were taken from the pumping well at the end of the pumping test (Monday, 19 Oct 98) by AECOS Laboratories. Preliminary water quality analyses were performed covering critical parameters as required by the owner.

Analyzed for: Color, TSS, pH, hardness, turbidity, Carbon Dioxide, Nitrogen as Nitrate, Nitrogen as Nitrite, Residual Chlorine, Alkalinity, Total Metals, Sulfate, Total and Dissolved Silica, Total Phosphorous, Chemical Oxygen Demand, Total Organic Carbon, Calcium, Mg, Na, Sulfate, Chloride as CACO3, Cation Sum and Anion Sum, aluminum, barium, calcium, iron, magnesium, potassium, sodium, and strontium (data attached).
DATA SUMMARY

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<td>Depth to water</td>
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<td>Drawdown - Water Level</td>
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<td>Draw down at the end of 7,200 minutes of pumping.</td>
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<td>Ground Elevation</td>
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<td>Electrical Conductance</td>
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<td>Total pumpage as of 5 days (7,200 minutes)</td>
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CONCLUSIONS

Based on the data obtained from the pumping tests, it appears that:

1. The aquifer system is capable of producing and sustaining the water requirements of 1,656,000 gallons per day (average day).

2. The Enserch Well #1 is capable of reliably producing at the design rate of 1150 gpm on a long-term production basis, however the test results indicate a rising salinity.

3. The water quality tests, based on results of the laboratory analyses, indicate that the groundwater quality at the end of the long-term test was excellent. The owner, based on its power generation needs, will determine quality issues.

4. The rising salinity at a constant pumping rate of 1150 gpm indicates that this rate of pumping is causing a significant adjustment of the basal lens. To illustrate this behavior, a graphic analysis (below) was prepared. As can be seen, the salinity increases as a function of the volume pumped under constant pumping. It is not known at this time how the well will actually be pumped.

Water Volume and Chlorides
Pumping Test Data and Graphs
5. Assuming an average water level head of 4', it is calculated that sea water salinity (about 20,000 mg/l chlorides) will be found at a depth below sea level of about 160 feet. The calculation assumes that the lens is in dynamic equilibrium and that, for every 1 foot of head above sea level, there will be 40 feet of fresh water below sea level. The record showing the extent of tidal influence (attached, page 10) indicated that the daily range of tide fluctuation is about 0.7 feet in double amplitude. This will likely cause a transition zone, between fresh (less than 250 mg/l chlorides) and salt water, of about 28 feet (0.7 fluctuation x 40').

It is reasonable to also assume that the seasonal variation in recharge will be on the order of 1 foot, thus expanding the transition zone by an additional 40', making a total transition zone thickness of about 70' (28' + 40').

Assuming the theoretical lens thickness is 164' (40' x 4' + 4'), the distance between the bottom of the well (-46') and the top of the transition zone (250 mg/l chlorides or greater) will be about 50' (164' total thickness, less 70 feet of transition zone, less 44' (4' of head + 40' of bore below sea level)) under non pumping conditions. This may result in rapid salt-water encroachment at a sustained pumping rate of 1150 gpm, as implied by the pumping test.

There is no absolute way of predicting the rate of salt-water encroachment, which may result short of actual operating experience. A projection of the salinity increase during the testing indicates that critical levels of salinity might occur within a year or so. Regardless, it is recommended that the supply of 1150 gpm be provided from 2 wells at 575 gpm each. This would provide a more reliable supply in terms of quality.
Walmea Water Services Inc.

Enserch Well #1
Section of As-Built Well
not to scale

WELL CROSS SECTION DIAGRAM
WELL PERMITS
(Attached)
WELL CONSTRUCTION PERMIT

WELL No. 4-06-12

Date of Application: March 4, 1997

Applicant: F. J. Wilson

1. The Applicant hereby certifies that the above named well is required for the public health and safety of this community.

2. The Applicant hereby certifies that the well is located on land which has not been sold, rented, or leased for a period of three years prior to the date of this application.

3. The Applicant hereby certifies that the well is not located within 1,000 feet of any existing well.

4. The Applicant hereby certifies that the well is not located within 1,000 feet of any public or private bodies of water, including swamps, lakes, streams, rivers, and springs.

5. The Applicant hereby certifies that the well is not located within 1,000 feet of any public or private landfills.

6. The Applicant hereby certifies that the well is not located within 1,000 feet of any public or private sewage treatment facilities.

7. The Applicant hereby certifies that the well is not located within 1,000 feet of any public or private industrial facilities.

8. The Applicant hereby certifies that the well is not located within 1,000 feet of any public or private power plants.

9. The Applicant hereby certifies that the well is not located within 1,000 feet of any public or private airports.

10. The Applicant hereby certifies that the well is not located within 1,000 feet of any public or private nuclear power plants.

11. The Applicant hereby certifies that the well is not located within 1,000 feet of any public or private hazardous waste facilities.

12. The Applicant hereby certifies that the well is not located within 1,000 feet of any public or private hazardous waste disposal sites.

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions in the best interest of the Applicant.

I, the Applicant, hereby certify that I have read and understand the conditions and terms of this permit.

Printed Name: F. J. Wilson

Date: 3/12/97

Firm or Title: F. J. Wilson

Partner: F. J. Wilson
WATER LEVEL AND TIDE INFORMATION

August 1998
Tide Chart

14  15  16  17

3:36am 0.1  10:30am 1.8  4:00pm 0.2  11:30am 2.0
5:10pm 0.8  9:33pm 1.1  6:48pm 0.7  11:00pm 0.8
5:56am 0.2  12:30pm 2.1  12:20am 0.9  6:39am 0.2
6:10pm 0.4

Levelogger dataprocessing v3.2 (c) 1996 Solinst

Location: Enserch #1  Instr.nr: 01-03730  Ch: 15
Ch 1: open hole-depth 986  Master level: -6.00 (ft)

Date/time: 21 Aug 1998 16:23:2
Min: 3.00 [ft]  Max: 8.40 [ft]

Water Level in Feet

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Record of Water Levels on 14 Aug – 17 Aug 98 and Tides

Enserch Well Report  Page #13
PLUMBNESS AND ALIGNMENT TEST
(Attached)
## ENSELCH WELL #1
### WELL ALIGNMENT DATA
Drift = Deflection*(height+depth)/height

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Enserch Well Plumbness Survey; South Drift; 22 Oct 98

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<tr>
<td>480</td>
<td>4.7920</td>
</tr>
</tbody>
</table>
WATER QUALITY DATA
(Attached)
CLIENT: Steve Bowies  
Waimea Water Service  
Kamuela, Hawaii

SAMPLE LOCATION: ENERCH POWER PLANT

DATE SAMPLED: 10/19/98

Aloha Steve,

Following are the results of the 10/19/98 sampling at Honakaa-Enersh Power Plant:

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>Unit</th>
<th>Method</th>
<th>MDL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>ND</td>
<td>mg/L</td>
<td>6010/200.7</td>
<td>0.050</td>
</tr>
<tr>
<td>Alkalinity</td>
<td>83</td>
<td>mg/L</td>
<td>S2320B</td>
<td>2.0</td>
</tr>
<tr>
<td>Anion Sum</td>
<td>7.26</td>
<td>meq/L</td>
<td>SM1040</td>
<td>0.0010</td>
</tr>
<tr>
<td>Barium, Total, ICAP</td>
<td>ND</td>
<td>mg/L</td>
<td>200.7</td>
<td>0.020</td>
</tr>
<tr>
<td>Calcium, Total, ICAP</td>
<td>17.1</td>
<td>mg/L</td>
<td>200.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Cation Sum</td>
<td>7.25</td>
<td>meq/L</td>
<td>SM1040</td>
<td>0.0010</td>
</tr>
<tr>
<td>Free Chlorine Residual</td>
<td>ND</td>
<td>mg/L</td>
<td>HACH</td>
<td>0.50</td>
</tr>
<tr>
<td>Chloride</td>
<td>180</td>
<td>mg/L</td>
<td>EPA 300</td>
<td>10</td>
</tr>
<tr>
<td>Free CO2 (25C)</td>
<td>2.5</td>
<td>mg/L</td>
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<td>0.0010</td>
</tr>
<tr>
<td>COD</td>
<td>ND</td>
<td>mg/L</td>
<td>EPA410.4</td>
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<tr>
<td>Color-Apparent</td>
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<td>ACU</td>
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<td>Specific Conductance</td>
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<td>umhos/cm</td>
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<td>Iron, Total, ICAP</td>
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<td>200.7</td>
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<tr>
<td>Total, Hardnesss CaCO3</td>
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<td>mg/L</td>
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<tr>
<td>Potassium, Total,ICAP</td>
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<td>Magnesium, Total,ICAP</td>
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<td>Sodium,Total,ICAP</td>
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<tr>
<td>Nitrite-N, IC</td>
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<td>mg/L</td>
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<td>Lab pH</td>
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<td>Unit</td>
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<td>Silica</td>
<td>44</td>
<td>mg/L</td>
<td>200.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Sulfate</td>
<td>23</td>
<td>mg/L</td>
<td>EPA 300</td>
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<tr>
<td>Strontium</td>
<td>0.11</td>
<td>mg/L</td>
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<td>T.Phosphorus</td>
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<tr>
<td>TDS</td>
<td>450</td>
<td>mg/L</td>
<td>S2540C</td>
<td>10</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>ND</td>
<td>mg/L</td>
<td>SM3310C</td>
<td>0.50</td>
</tr>
<tr>
<td>TSS</td>
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<tr>
<td>Turbidity</td>
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<td>NTU</td>
<td>EPA 180.1</td>
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</table>
CLIENT: Waimea Water Services

Location: Honokaa-Enserch Power Plant

CALCULATIONS TO REPORT DATA AS CACO3

<table>
<thead>
<tr>
<th>Compound</th>
<th>Result, mg/L</th>
<th>Result, mg/L C4CaO3</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>Magnesium</td>
<td>20.8</td>
<td>85.6</td>
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<tr>
<td>Sodium</td>
<td>103</td>
<td>448</td>
</tr>
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<td>83</td>
<td>83</td>
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<tr>
<td>Sulfate</td>
<td>23</td>
<td>24</td>
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<tr>
<td>Chloride</td>
<td>180</td>
<td>509</td>
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</table>

ADDITIONAL ANALYTES

<table>
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<tr>
<th>Compound</th>
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<tbody>
<tr>
<td>Silica, as SiO2</td>
<td>44 mg/L</td>
</tr>
<tr>
<td>Cation Sum</td>
<td>7.25 meq/L</td>
</tr>
<tr>
<td>Anion Sum</td>
<td>7.26 meq/L</td>
</tr>
</tbody>
</table>
WELL DRILLING CONTRACTORS COMPLETION REPORT
(Attached)
**WELL COMPLETION REPORT**

**State of Hawaii**  
**COMMISSION ON WATER RESOURCE MANAGEMENT**  
**Department of Land and Natural Resources**

**WELL COMPLETION REPORT**  
32/2096 WCR Form

<table>
<thead>
<tr>
<th>(Check Appropriate Box)</th>
<th>□ Well Construction</th>
<th>□ (Permanent) Pump Installation</th>
</tr>
</thead>
</table>

**Instructions:** Please print or type and submit completed report within 30 days after well completion to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96808. An as-built drawing of the well and chemical analysis should also be submitted. For assistance call the Commission Regulation Branch at 587-0225, or 1-800-468-4544 Extension 70225.

1. State Well No.: 6528-02  
2. Well Name: Enserch Well # 1  
3. Location/Address: HONOKAA, HAWAII  
4. Island: Hawaii  
5. Tax Map Key: 3-4-5-02:23

**PART I.**

**WELL CONSTRUCTION REPORT**

3. Drilling Company: WAI'ELI DRILLING & DEVELOPMENT

4. Name of driller who performed work: TOM HELFRICH

5. Type of rig/construction: ROTARY

6. Date(s) Well Construction and pump tests (if any) completed: 11/30/98

7. GROUND ELEVATION (referred to mean sea level): 445.5 ft.

   Well Bench Mark (description/location): punch mark on casing

   Elevation (msl): 445.5 ft.

8. DRILLER'S LOG: Please attach geologic log (if available or if required by permit)

   Depths (ft.) Rock Description, Water Level, Dates, etc.
   0 to 65 Hard  
   65 to 180 Mixed-soft layers  
   180 to 362 Cinder  
   362 to 986 Hard

   (If more space is needed, continue on back.)

9. Total depth of well below ground: 486 ft.

10. Hole size: 20 inch dia. from 0 ft. to 486 ft. below ground

11. Casing installed: 14 in. I.D. x 0.375 in. wall solid section to 446 ft. below ground

12. Annulus: Grouted from 0 ft. below ground to 392 ft. below ground

13. Initial water level: 442.04 ft. below ground.  
15. Initial temperature: 69.62 °F  
16. PUMPING TESTS: Reference Point (R.P.) used: punch mark on casing which elevation is 445.5 ft.

   (1) Step-Drawdown Test Date 9/15/98  
   Start water level 442 ft. below R.P.  
   End water level 442 ft. below R.P.

   (2) Long-term Aquifer Test Date 10/14/98  
   Start water level 442 ft. below R.P.  
   End water level 442 ft. below R.P.

17. Aquifer Pump Test Procedures data & graphs (1/8/96 LTAT Form) attached? Y | Yes _ No

18. As-built drawings attached? Y | Yes _ No

19. Other remarks/comments: (Or back of this form)

**Well Drilling Contractor:** WAI'ELI DRILLING  
**C-57 Lic. No.: C-16543**

**Signature:**

**Date:** 12/15/98

**Surveyor (print):**

**License No.:**

**Signature:**

**Date:**

**Applicant (print):**

**Signature:**

**Date:**
TO: Commission on Water Resource Management  
FROM: Steve Bowles  
        John Stubbart  
DATE: December 22, 1998  
SUBJ: WELL COMPLETION REPORT  

Please find enclosed one copy of the Enserch Well #1 Well Completion Report for your review and files. Should you have any questions, please feel free to call me.

Thank you.

cc: Jody Allione  
       Frank Meyers/Randy Tipton
ENSERCH WELL #1
WELL COMpletion REPORT

State Well No. 6528-02

November 1998

Prepared by Waimea Water Services Inc.
for
Encogen Hawaii, LP

Enserch Well Report
WELL CONSTRUCTION, PERMITS

The Enserch Well #1 (State Well No. 6528-02) was permitted by the State of Hawaii, Commission on Water Resource Management in 4 March 97 (copy attached).

WELL CONSTRUCTION, PLANS

Plans and specifications were reviewed and approved by Jody Allione of Encogen, Hawaii, LP. The well location was determined in conduction with the Encogen engineering staff. The location maps showing the well location and siting are included along with an overall map showing the relationship to the surrounding area.

WELL CONSTRUCTION, SUMMARY

The Well construction contracts were signed 23 June 98 with Wai'eli Drilling and Development. The Notice to Proceed was effective 23 June 98. Well work began on 25 June 98. The first hole was abandoned and grouted due to lost tools in the hole. A new hole was started on 28 July 98, 10’ east of the first hole. The pilot hole (12.75") was completed on 4 Aug 98 to a depth of 486 feet. The water level stood at 3.53’ above msl.

The pilot hole was reamed to 18” diameter and was completed on 13 Aug 98.

A pumping test of the well was done in two stages. The first test was conducted at a flow rate of 700 gpm, resulting in a drawdown of 1.2' with a chloride content of 145 to 155 mg/l. The open hole was then tested at 500 gpm and 850 gpm. The drawdown at 500 gpm was 0.8’, with the chloride content rising from 115 mg/l to stabilize at about 150 mg/l. At 850 gpm, the chlorides rose to 150 mg/l and the drawdown was 1.6’.

A larger pump was installed and a pumping test was run at an average rate of 1043 gpm
with a drawdown of 2.8 feet (15 Sep 98). The chlorides reached 160 mg/l and the TDS was 335 mg/l.

Based on the pumping tests, the well was reamed to 22" to accept a 14" casing. Casing and grouting of the annular space around the well casing section was completed by October 1998.

A final pumping test was run from 14 Oct 98 to 19 Oct 98. Water quality samples were taken on Monday morning, 19 Oct 98 (data attached).

An As-built section drawing of the well is attached.

Plumbness and alignment tests were conducted on 22 Oct 98 (see attached report). A 40-foot long dummy having an outside diameter of 13.5 inches passed freely down the cased well. A cage traverse of the cased well was also performed. The results of the two tests showed that the well met the specifications for each 100' and did not vary in excess of more than two-thirds the smallest inside diameter for any 100-foot interval (data attached).

PUMPING TEST - SPECIFIC CAPACITY

The series of tests conducted were considered adequate to project the specific capacity of the well, even though they were performed in the uncased well. The open hole tests resulted in the following drawdowns. The graph below shows the data and results.
PUMPING TEST - LONG TERM TEST

A long-term aquifer-pumping test at a rate of 1043 commenced at 9:16 am on 14 Oct 98. Water levels were continuously recorded at the pumping well using an air line system. In addition, a down hole recording system was operated. The pumping water level data after 5 days (7,200 minutes) resulted in a final drawdown in the pumping well of 2.8 feet. The data and graphical representations are attached. Following a recovery period of 3.0 minutes the water level at the Enserch well returned to a static level of +4.27'.

Enserch Well Report Page # 3
Benchmarks were established on the well head (measuring points) by Waimea Water Services Inc.

QUALITY TESTING

Water quality samples were taken from the pumping well at the end of the pumping test (Monday, 19 Oct 98) by AECOS Laboratories. Preliminary water quality analyses were performed covering critical parameters as required by the owner.

Analyzed for: Color, TSS, pH, hardness, turbidity, Carbon Dioxide, Nitrogen as Nitrate, Nitrogen as Nitrite, Residual Chlorine, Alkalinity, Total Metals, Sulfate, Total and Dissolved Silica, Total Phosphorous, Chemical Oxygen Demand, Total Organic Carbon, Calcium, Mg, Na, Sulfate, Chloride as CACO3, Cation Sum and Anion Sum, aluminum, barium, calcium, iron, magnesium, potassium, sodium, and strontium (data attached).

DATA SUMMARY

Non-pumping Water Level

+4.27' Elevation
440.94' Depth to water

Drawdown - Water Level

+1.5' Draw down at the end of 7,200 minutes of pumping.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elevation</td>
<td>446'</td>
</tr>
<tr>
<td>Pumping Rate (average)</td>
<td>1043 gpm</td>
</tr>
<tr>
<td>Temperature</td>
<td>20.9 °F</td>
</tr>
<tr>
<td>Chlorides</td>
<td>160 mg/l (field)</td>
</tr>
<tr>
<td>Electrical Conductance</td>
<td>703 microsiemens</td>
</tr>
<tr>
<td>Total pumpage as of 5 days</td>
<td>7,515,000 gallons</td>
</tr>
<tr>
<td>(7,200 minutes)</td>
<td></td>
</tr>
</tbody>
</table>

**CONCLUSIONS**

Based on the data obtained from the pumping tests, it appears that:

1. The **aquifer system** is capable of producing and sustaining the water requirements of 1,656,000 gallons per day (average day).

2. The **Enserch Well #1** is capable of reliably producing at the design rate of 1150 gpm on a long-term production basis, however the test results indicate a rising salinity.

3. The water quality tests, based on results of the laboratory analyses, indicate that the groundwater quality at the end of the long-term test was excellent. The owner based on its power generation needs will determine quality issues.

4. The rising salinity at a constant pumping rate of 1043 gpm indicates that this rate of pumping is causing a significant adjustment of the basal lens.

5. Assuming an average water level head of 4', it is calculated that sea water salinity (about 20,000 mg/l chlorides) will be found at a depth below sea level of about 160 feet. The calculation assumes that the lens is in dynamic equilibrium and that, for every 1 foot of head above sea level, there will be 40 feet of fresh water below sea level. The record showing the extent of tidal influence (attached, page 10) indicated that the daily range of tide fluctuation is about 0.7 feet in double amplitude. This will
likely cause a transition zone, between fresh (less than 250 mg/l chlorides) and salt water, of about 28 feet (0.7 fluctuation x 40').

It is reasonable to also assume that the seasonal variation in recharge will be on the order of 1 foot, thus expanding the transition zone by an additional 40', making a total transition zone thickness of about 70' (28' + 40').

Assuming the theoretical lens thickness is 164' (40' x 4' + 4'), the distance between the bottom of the well (-46') and the top of the transition zone (250 mg/l chlorides or greater) will be about 50' (164' total thickness, less 70 feet of transition zone, less 44' (4' of head + 40' of bore below sea level)) under non-pumping conditions. This may result in rapid salt-water encroachment at a sustained pumping rate of 1150 gpm, as implied by the pumping test.

There is no absolute way of predicting the rate of salt-water encroachment, which may result short of actual operating experience. A projection of the salinity increase during the testing indicates that critical levels of salinity might occur within a year or so. Regardless, it is recommended that the supply of 1150 gpm be provided from 2 wells at 575 gpm each. This would provide a more reliable supply in terms of quality.
WELL CROSS SECTION DIAGRAM

Enserch Well Report  Page # 7
WELL PERMITS
(Attached)
WELL CONSTRUCTION PERMIT

Ensearch Well, Well No. 9528-92

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13.113, entitled "Water Use, Wells, and Drilled Compilation Water", this document permits the construction and testing of Ensearch Well (Well No. 9528-92) of Honolulu, Hawaii. TIN: 6-6-903-926, subject to the Hawaii Well Construction & Pump Installation Standards (12/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 921, Honolulu, Hawaii 96823, shall be notified in writing, at least two (2) weeks before any work authorized by this permit commences.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor line shall be permanently installed, in a manner accessible to the Chairperson, to accurately record water levels. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and monitor water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In unceded ground water, the depth of the well may not exceed one-twelfth (1/12) of the theoretic thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee 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 shall stop work and contact the Department's Historic Preservation Division (587-0045) 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 associated stream flow standards. This permit or the authorization to construct the well shall not constitute a determination of cumulative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after conclusion of work:
   b. Elevations (represented to mean sea level, real survey) by a licensed surveyor.
   c. As-built sectional drawings of the well.
   d. Plat map and map showing the exact location of the well.
   e. A complete pumping test record, including start, pumping rate, drawdown, chloride content, and other data.

8. The permittee shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of the 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 (12/23/97).

10. 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 well construction permit application shall be completed within ten (2) years from the date of permit approval, unless otherwise specified. The permit may be revoked 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 thirty (30) days prior to the date the permit expires. If the commencement date is met, the Commission may revoke the permit after giving the permittee 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 must apply for a well abandonment permit in accordance with R.S. 13-159-120 prior to any well boring or plugging work.

12. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: March 4, 1997
Expiry Date: March 4, 1999

Michael D. Wilson, 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 to and underlying condition of my ability to proceed. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee's Signature: Judy S. Allione
Date: 3/25/97
Printed Name: Judy S. Allione
Firm or Title: Encomm, Hawaii, L.P.

Driller's Signature: C. Jack Starkweather
Date: 12/18/98
Printed Name: C. Jack Starkweather
Firm or Title: Partner

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

Attachment:

UOGS
Department of Health/ State Office of Water & Wastewater Branches
Honolulu Department of Water Supply
Hawaiian Sugar Company
Record of Water Levels on 14 Aug – 17 Aug 98 and Tides
**Final Pumping Test – Average Rate was 1043 gpm**

**Water Level and Chlorides**

**PUMPING TEST DATA AND GRAPHS**
Plumbness and Alignment Test
<table>
<thead>
<tr>
<th>DEPTH FEET</th>
<th>NORTH</th>
<th></th>
<th></th>
<th>EAST</th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
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<td>0.000</td>
<td>0.0000</td>
<td>10.000</td>
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Enserch Well Plumbness Survey; East Drift; 22 Oct 98

Alignment in Inches vs. Depth in Feet
WATER QUALITY DATA
(Attached)
The following are the results of the 10/19/98 sampling at Honakaa-Enserch Power Plant:

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<tr>
<th>Analyte</th>
<th>Result</th>
<th>Unit</th>
<th>Method</th>
<th>MDL</th>
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<td>mg/L</td>
<td>6010/200.7</td>
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<tr>
<td>Alkalinity</td>
<td>83</td>
<td>mg/L</td>
<td>S2320B</td>
<td>2.0</td>
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<tr>
<td>Anion Sum</td>
<td>7.26</td>
<td>meq/L</td>
<td>SM1040</td>
<td>0.0010</td>
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<tr>
<td>Barium, Total, ICAP</td>
<td>ND</td>
<td>mg/L</td>
<td>200.7</td>
<td>0.020</td>
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<tr>
<td>Calcium,Total, ICAP</td>
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<td>mg/L</td>
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<tr>
<td>Cation Sum</td>
<td>7.25</td>
<td>meq/L</td>
<td>SM1040</td>
<td>0.0010</td>
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<tr>
<td>Free Chlorine Residual</td>
<td>ND</td>
<td>mg/L</td>
<td>HACH</td>
<td>0.50</td>
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<tr>
<td>Chloride</td>
<td>180</td>
<td>mg/L</td>
<td>EPA 300</td>
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<tr>
<td>Free CO2 (25C)</td>
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<td>S2320B</td>
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<tr>
<td>COD</td>
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<td>mg/L</td>
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<td>ACU</td>
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<td>Specific Conductance</td>
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<td>umhos/cm</td>
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<td>Iron, Total, ICAP</td>
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<td>Potassium, Total, ICAP</td>
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<tr>
<td>Nitrite-N, IC</td>
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<td>Silica</td>
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<td>mg/L</td>
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<td>S2540C</td>
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<td>Total Organic Carbon</td>
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<td>NTU</td>
<td>EPA 180.1</td>
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CLIENT: Waimea Water Services
Location: Honokaa-Enserch Power Plant
CALCULATIONS TO REPORT DATA AS CACO3

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<th>Result, mg/L CaCo3</th>
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<td>Chloride</td>
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ADDITIONAL ANALYTES

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<td>7.25 meq/L</td>
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<tr>
<td>Anion Sum</td>
<td>7.26 meq/L</td>
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</table>

Karen Klein, Director
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

WELL COMPLETION REPORT

320/96 WCR Form

(Check Appropriate Box) □ Well Construction □ (Permanent) Pump Installation

Instructions: Please print or type and submit completed report within 30 days after well completion to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. An as-built drawing of the well and chemical analysis should also be submitted. For assistance call the Commission Regulation Branch at 587-0225, or 1-800-468-4614 Extension 70225.

1. State Well No.: 6528-02  Well Name: Enserch Well # 1  Island: Hawaii
2. Location/Address: HONOKAA, HAWAI'I  Tax Map Key: 3-4-5-02:23

PART I.

WELL CONSTRUCTION REPORT

3. Drilling Company: WAI'ELI DRILLING & DEVELOPMENT
4. Name of driller who performed work: TOM HELFRICH
5. Type of rig/construction: ROTARY
6. Date(s) Well Construction and pump tests (if any) completed: 11/30/98
7. GROUND ELEVATION (referred to mean sea level, msl): 445.5 ft.
   Well Bench Mark (description/location): punch mark on casing
   Elevation (msl): 445.5 ft.
8. DRILLER'S LOG: Please attach geologic log (if available or if required by permit)
   Depths (ft)  Rock Description, Water Level, Dates, etc.
   0 to 65  Hard
   65 to 180  Mixed-soft layers
   180 to 362  Cinder
   362 to 486  Hard
   (If more space is needed, continue on back)
9. Total depth of well below ground: 486 ft.
10. Hole size:
    20 inch dia. from 0 ft. to 486 ft. below ground
    ________________ inch dia. from __________ to __________ ft. below ground
    ________________ inch dia. from __________ to __________ ft. below ground
11. Casing installed:
    14 in. I.D. x .375 in. wall solid section to 446 ft. below ground
    14 in. I.D. x .312 in. wall perforated section to 486 ft. below ground
    Casing Material/Slot Size: 1/4" 120 per ft
12. Annulus:
    Grouted from __________ ft. below ground to 392 ft. below ground
    Gravel packed from 392 ft. below ground to 402 ft. below ground
13. Initial water level: 442.04 ft. below ground.
15. Initial temperature: 69.62°F
16. PUMPING TESTS: Reference Point (R.P.) used: punch mark on casing
    (1) Step-Drawdown Test Date 9/15/98
       Start water level 442 ft. below R.P.
       End water level 442 ft. below R.P.
    (2) Long-term Aquifer Test Date 10/14/98
       Start water level 442 ft. below R.P.
       End water level 442 ft. below R.P.
17. Aquifer Pump Test Procedures data & graphs (1/96 LTAT Form) attached? X Yes _ No
18. As-built drawings attached? _ Yes X No
19. Other remarks/comments: (On back of this form)

Well Drilling Contractor: WAI'ELI DRILLING
C-57 Lic. No. C-16543

Signature
Date 12/15/98

Surveyor (print)
Signature
Lic. No. __________
Date __________

Applicant (print)
Signature
Date __________
Ms. Jody Allione  
Encogen, Hawaii, L.P.  
611 Anton Boulevard, #800  
Costa Mesa, California 92626

Dear Ms. Allione:

Well Construction Permit  
Enserch Well (Well No. 6528-02)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) which authorizes 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 12:

Special Conditions

1. No Special Conditions

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon information provided to and accepted by Commission staff from the aquifer pumping test results, as required in Well Construction & Pump Installation Standards (1/23/97), performed under this permit.

The well owner is 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.

Please sign and have the contractor sign the permit originals and return one for our files. Also, copies of the aquifer pump test procedure and the well completion report form are enclosed for your use. Please provide all the information in this packet to your well drilling contractor.

Attached for your reference are comments from the State Department of Health.

If you have any questions, please call Mr. Ryan Imata of Commission staff at 587-0255 or toll-free at 974-4000, extension 70255.

Aloha,

[Signature]

MICHAEL D. WILSON  
Chairperson

Enclosures
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 Enserch Well (Well No. 6528-02) at Honolulu, Hawaii, TMI 4-5-002: 023, 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.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee 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 basalt ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basalt ground water unless otherwise authorized by the Chairperson.

4. The permittee 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 shall stop work and contact the Department's Historic Preservation Division (587-0045) 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 shall comply with all applicable laws, rules, and ordinances, and 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 (1/23/97).

10. 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 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 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 must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

12. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: March 4, 1997
Expiration Date: March 4, 1999

Michael D. Wilson, 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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee’s Signature: ___________________________ Date: __________

Printed Name: ___________________________ Firm or Title: ___________________________

Driller’s Signature: ___________________________ 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 / Safe Drinking Water & Wastewater Branches
Hawaii Department of Water Supply
Hamakua Sugar Company
1. **Pump Tests Check**  Glenn Bauer \[\] (initial)

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<th>No</th>
<th>If no, describe deficiency</th>
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</tr>
<tr>
<td>followed WCPI Stds</td>
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<tr>
<td>analysis attached</td>
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<tr>
<td>proposed pump cap o.k.</td>
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<td></td>
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</tr>
</tbody>
</table>

Aquifer Pump Test:

| acceptable                      |     |    |                           |
| followed WCPI Stds              |     |    |                           |
| T & S analysis attached         |     |    |                           |

Well Interference:

| estimated Steady-State          |     |    |                           |
| drawdown at 1-mile radius is    |     |    |                           |
| ft.                            |     |    |                           |
| analysis attached               |     |    |                           |

Stream Surface Water Impacted:

| If yes, identify most probable stream |

2. **Construction Check**  Mitch Ohye \[\] (initial)

| data complete                  | Yes | No | If no, describe deficiency |
| followed WCPI Stds             |     |    |                           |
| wellphys.dbf updated           |     |    |                           |
| welaplic.dbf updated           |     |    |                           |
Enserch Well #1
Section of As-Built Well

not to scale
Nov 98

WELL CROSS SECTION DIAGRAM
Ms. Jody Allione  
Encogen Hawaii, L.P.  
611 Anton Boulevard, #800  
Costa Mesa, CA  92626  

Dear Ms. Allione:  

Well Completion Report for Well No. 6528-02  

We have received your Well Completion Report Part I for the Enserch Well (Well No. 6528-02). However, matters which must be addressed before we accept your report as complete are as follows:  

1. Please submit an elevation survey per condition 7b. of your well construction permit.  

Please respond to the above item(s) within sixty (60) days of this letter's date. Failure to do so may result in fines of up to $1000 per day starting from the date of this notice.  

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

Sincerely,  

[Signature]  

EDWIN T. SAKODA  
Acting Deputy Director  

RI:ss  
c: Waimea Water Services
1. **Pump Tests Check**  Glenn Bauer (initial)

   **Step-Drawdown Test:**
   - acceptable
   - followed WCPI Stds
   - analysis attached
   - proposed pump cap o.k.

   **Aquifer Pump Test:**
   - acceptable
   - followed WCPI Stds
   - T & S analysis attached

   **Well Interference:**
   - estimated Steady-State drawdown at 1-mile radius is 0.082 ft.
   - analysis attached

   **Stream Surface Water Impacted:**
   -

2. **Construction Check**  Mitch Ohye (initial)

   **data complete**
   - followed WCPI Stds
   - wellphys.dbf updated
   - welaplic.dbf updated

   **If no, describe deficiency:**
   - seen pressure analysis
   - see Step-Drawdown analysis
   -

   → If yes, identify most probable stream
STEP-DRAWDOWN ANALYSIS
By Glenn Bauer

NAME OF WELL: Enserch Well No. 1 (6528-02)
DATE OF TEST: Sept. 15, 1998
DATE OF ANALYSIS: 14-Jan-99

s(ft) ds (ft) GPM s/Q
0.8 0.8 500 0.0016
1.2 0.4 700 0.0017
1.6 1.2 850 0.0019
2.8 1.6 1,043 0.0027

Regression Output:
Constant = 0.00048 = b
Std Err of Y Est = 0.000256
R Squared = 0.81814
No. of Observations = 4
Degrees of Freedom = 2
X Coefficient(s) = 1.9E-06 = c
Std Err of Coef. = 6.4E-07

Drawdown(tot) = Drawdown(aq.) + Drawdown(well)

s = bQ + cQ^2 if Q = 1.043 gpm
bQ = 0.501 calc. s = 2.597 ft.
cQ^2 = 2.097
L = 19.27 PERCENT OF HEAD LOSS = LAMINAR FLOW

adjusted drawdown using L @ 0 gpm
0.00 ft.

Polubarinova-Kochina Eq.

Adjusted "s" using constant "b"

0.24
0.34
0.41
0.50
0.00

K = Qin(1.6L/r)/2piLs = 6,220 ft/d
L = length of open interval in well = 46 ft
r = radius of well in ft. = 0.83 ft
s = drawdown in well adjusted for well loss = 0.50 ft
Q = pumping rate in cu. ft./d = 200,791 cu. ft./d
h = water level = 4
b = thickness of aquifer (41"h) = 175 ft
T = transmissivity = k*b = 1,088,911 ft²/d

SPECIFIC CAPACITY Q/s = FOR ANY Q

Q = 1,043 gpm
Q/s = 652 GAL/FT OF DD

Notes: Thickness of aquifer is assumed to be: 175 ft.
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: Tim  DATE: 1/4  SUSPENSE DATE

TO:  INIT.  TO:  INIT.  FOR:  PLEASE:

BAUER, G.  —  LUM, A.  —  Approval  See Me
CHING, F.  —  NAKAMA, L.  —  Signature
FUJII, N.  —  NAKANO, D.  —  Information

HARDY, R.  —  OHYE, M.  —
HIRANO, E.  P  SAKODA, E.  —
ICE, C.  —  SUBIA, S.  —
IMATA, R.  —  SWANSON, S.  —
JINNAI, R.  —  UWAINE, J.  —
JOHNS, T.  —  UYENO, D.  —
KUNIMURA, I.  —  YODA, K.  —

See Me  Review & Comment  Take Action
Type Draft  Type Final  File
Xerox copies
December 21, 1998

Commission on Water Resource Mgmt
Department of Land & Natural Resources
P.O. Box 621
Honolulu, HI 96809

To whom it concern:

Enclosed is the Well Construction Permit for Enserch Well #6528-02 for your files. Should you have any questions, please feel free to call me.

Thank you.

Sincerely,

John Stubbart

/skim
Enclosure
WELL CONSTRUCTION PERMIT

Enssrch Well; Well No. 8628-02

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-163, entitled "Water Use, Wells, and Groundwater Diversion Water," this document permits the construction and testing of research Well (Well No. 8628-02) at Hanalei, Kauai, TMK 6-6-92L, Section 2, subsections 1 and 2, subject to the Hanalei Well Construction & Pump Installation Standards (HWCPS) 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.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (APP). The permittee shall submit to the Chairperson the test results and a basis for supporting an application to install a permanent pump and monitor water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In order to prevent the damage of the well, the depth of the well may not exceed one-third (1/3) of the theoretical thickness (1/4 times initial head) of the base water level unless otherwise authorized by the Chairperson.

4. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquifer environment, 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 shall stop work and contact the Department's Historic Preservation Division (33-0-045) immediately.

6. The proposed well construction shall not destroy or destroy existing or future legal uses of water in the area, including any surface water or established groundwater use.

7. The following must be submitted to the Chairperson within thirty (30) days after completion of work:
   a. Well completion report (attached - Parts I, II, III, and IV, Pump Installation Standards (HWCPS).)
   b. Elevator (referenced to mean sea level, math 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 results, including time, pumping rate, drawdown, chloride content, and other data

8. The permittee shall comply with all applicable laws, rules, and ordinances, and 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 Hanalei Well Construction & Pump Installation Standards (HWCPS).

10. The permit may be revoked if the 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 revoked 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 notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used or must be properly capped. If the well is to be abandoned, then the permittee must apply for a well abandonment permit in accordance with §13-163-120 prior to any well testing or plugging work.

12. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: March 4, 1997
Expiration Date: March 4, 1999

Michael D. Wilson, 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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee's Signature: Judy A. Allione
Printed Name: Judy A. Allione
Firm or Title: Engees, Kauai, L.P.

Driller's Signature: L.W. Chittenden
Printed Name: L.W. Chittenden
Firm or Title: Partner

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

Attachment:

UOGS
Department of Health Safe Drinking Water Branches
Hawaii Department of Water Supply
Hawaiian Sugar Company
THEIS DRAWDOWN CALCULATION by Glenn Bauer & Roy Hardy with numeric approximations by Huntoon (1980)

FILE NAME = Enserch Well No. 1 (6528-02)
TEST NAME = Step-Drawdown Test
DATE = September 15, 1998

INPUT PARAMETER GREEN VALUES

| Transmissivity | T = 1,088,911 ft.^2/day |
| Storage Coeff. | S = 0.200 dimensionless |
| Time | t = 200,000 days |
| Pumping Rate | Q = 221,390.37 cubic ft./day |
| Aquifer thickness | b = 175 ft. |
| Hydraulic Conductivity | K = 6,222.3 ft./day |
| Pumping rate | Q = 1.150 gpm |
| | 1.656 mgd |
| | 2.562 cfs |

Radial distance from well r ft.

<table>
<thead>
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<th>r (ft.)</th>
<th>u</th>
<th>W(u)</th>
<th>Drawdown s (ft.)</th>
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OBSERVATION WELL

Radial distance r from pumping well 1000 ft.

Time, t (days, year) | u | Drawdown s (ft.) |
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The Theoretical drawdown a mile (5,280 ft) from the pumping well when u <= 0.01

T = 10,889,111 ft.^2/day
Sp. yield = 0.2
t = 365 days
s = 0.082 ft.
Ms. Jody Allione  
Encogen, Hawaii, L.P.  
611 Anton Boulevard, #800  
Costa Mesa, California 92626

Dear Ms. Allione:

Well Construction Permit  
Enserch Well (Well No. 6528-02)

By this letter, your request for a well construction start date extension is approved. Construction of the well shall commence no later than November 1, 1998. The rest of your permit conditions remain the same, including your Expiration Date of March 4, 1999.

You are also reminded to return your permit for validation with the Driller’s signature prior to commencing construction.

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

Aloha,

[Signature]  
For MICHAEL D. WILSON  
Chairperson

c: Waimea Water Services
Predicted rise of the saltwater interface

\[ Z_t = \frac{p_f Q}{2 \pi (p_s - p_f) K_x L^* (1 - 2 p_f n L / (2 p_f n L + (p_s - p_f) K_z t))} \]

Where:

- \( Z_t \) = rise of cone center at time \( t = 1.886727 \)
- \( Q \) (ft\(^3\)/d) = well discharge = 221386
- \( L \) = Depth of mid-pt. below bottom of well before pumping = 120
- \( K_x \) = Horizontal \( K = 6220 \)
- \( K_z \) = Vertical \( K = 4.6 \)
- \( n \) = porosity of aquifer = 0.2
- \( p_s \) = density of salt water = 1.025
- \( p_f \) = density of freshwater = 1
- \( t \) = time since start of pumping = 500000

Well Name: Enserch Well No. 1 (6528-02)
Kx analysis by: Glenn Bauer

Assume \( K_x / K_z = 200 \)

<table>
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<th>( t ) (days)</th>
<th>( t ) (years)</th>
<th>( Z_t )</th>
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23 April 98

Mr. Mike Wilson, Chairperson
Commission on Water Resource Management
Dept. of Land and Natural Resources
Division of Water Resources Management
State of Hawaii
P.O.B. 621
Honolulu, Hawaii 96809

ATTENTION: Deputy Director

SUBJECT: Request for Extension to Well Construction Start Date
Construction Permit #8528-02
Enserch Well
Honokaa, Hawaii

Dear Mr. Wilson,

On behalf of the owners of the Enserch Well, Enserch Development Corporation, Jody Allione, we are requesting an extension to the permitted well under Condition #10; referencing the start work date. The original permit date was 4 March 97 with a start date of 4 Sept. 97. This was extended by CWRM to 1 May 98. Construction of the power facilities was delayed due to PUC approvals on power purchase agreement terms and the DOH in finalizing the permit for the power plant. These have now been cleared and the well drilling is set to commence on 15 June 98. Would you please allow an extension of the construction start date to 1 July 98.

Construction documents are now being finalized for bidding. The bid should be awarded by the end of May 1998.

If there are any questions, please call the undersigned.

Very truly yours,

John Stubbart
President

cc: John Spicer
    Jody Allione
23 April 98

Mr. Mike Wilson, Chairperson
Commission on Water Resource Management
Dept. of Land and Natural Resources
Division of Water Resources Management
State of Hawaii
P.O.B. 621
Honolulu, Hawaii 96809

ATTENTION: Deputy Director

SUBJECT: Request for Extension to Well Construction Start Date
Construction Permit #8628-02
Enserch Well
Honokaa, Hawaii

Dear Mr. Wilson,

On behalf of the owners of the Enserch Well, Enserch Development Corporation, Jody Allione, we are requesting an extension to the permitted well under Condition #10; referencing the start work date. The original permit date was 4 March 97 with a start date of 4 Sept. 97. This was extended by CWRM to 1 May 98. Construction of the power facilities was delayed due to PUC approvals on power purchase agreement terms and the DOH in finalizing the permit for the power plant. These have now been cleared and the well drilling is set to commence on 15 June 98. Would you please allow an extension of the construction start date to 1 July 98.

Construction documents are now being finalized for bidding. The bid should be awarded by the end of May 1998.

If there are any questions, please call the undersigned.

Very truly yours,

John Stubbart
President

cc: John Spieker
    Jody Allione
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REF:CWRM-SS

Ms. Jody Allione
Encogen, Hawaii, L.P.
611 Anton Boulevard, #800
Costa Mesa, California  92626

Dear Ms. Allione:

Well Construction Permit
Enserch Well (Well No. 6528-02)

By this letter, your request for a well construction start date extension is approved. Construction of the well shall commence no later than May 1, 1998. The rest of your permit conditions remain the same, including your Expiration Date of March 4, 1999.

You are also reminded to return your permit for validation with the Driller’s signature prior to commencing construction.

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

Aloha,

MICHAEL D. WILSON
Chairperson

Waimea Water Services
21 July 97

Mr. Mike Wilson, Chairperson
Commission on Water Resource Management
Dept. of Land and Natural Resources
Division of Water Resources Management
State of Hawaii
P.O.B. 621
Honolulu, Hawaii 96809

ATTENTION:  Rae M. Loui
              Deputy Director

SUBJECT:  Request for Extension to Well Construction Start Date
          Construction Permit #5528-02
          Enserch Well
          Honokaa, Hawaii

Dear Mr. Wilson,

On behalf of the owners of the Enserch Well, Enserch Development Corporation, Jody Allione, we are requesting an extension to the permitted well under Condition #10; referencing the start work date. The permit date was 4 March 97. Based on starting the well construction within 6 months of the permit date, the commencement of construction would have to be by 4 Sept. 97. However, the start date for construction of the power facilities has been delayed due to delays by the PUC and approving the power purchase agreement terms and by the DOH in finalizing the covered source permit for the power plant.

Enserch Development Corp. expects to have the final DOH permits and approval in the next 6 to 8 months. We thus request that the permit commencement date be extended to allow the owner to gain final permits.

If there are any questions, please call the undersigned.

Very truly yours,

John Stubbart
President

cc:  Jody Allione
Ms. Jody Allione  
Encogen, Hawaii, L.P.  
611 Anton Boulevard, #800  
Costa Mesa, California 92626

Dear Ms. Allione:

Well Construction Permit  
Enserch Well (Well No. 6528-02)

Thank you for returning your signed permit. However, you are required to have a contractor, when chosen, sign your well construction permit. We are returning your signed well construction permit for the contractor’s signature.

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

Aloha,

[Signature]

MICHAEL D. WILSON  
Chairperson

Enclosure
WELL CONSTRUCTION PERMIT

Enserch Well, Well No. 6528-02

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 Enserch Well (Well No. 6528-02) at Honokaa, Hawaii, TMK 4-6-002: 023, 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.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee 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 basalt 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 Chairperson.

4. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of heavy 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 shall stop work and contact the Department's Historic Preservation Division (587-0045) 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 shall comply with all applicable laws, rules, and ordinances, and 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 (1/23/97).

10. 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 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 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 must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

12. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: March 4, 1997
Expiration Date: March 4, 1999

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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee's Signature: Jody A. Allione
Date: 3/25/97
Firm or Title: Encogen, Hawaii, L.P.

Printed Name: Jody A. Allione

Driller's Signature: To Be Determined
Date: 
Firm or Title: 

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:

USGS
Department of Health/ Safe Drinking Water & Wastewater Branches
Hawaii Department of Water Supply
Hamakua Sugar Company

Signature: Michael D. Wilson, Chairperson
Commission on Water Resource Management

Date: 3/25/97
DATE: 2/20/97

TO: Ryan Imoto - Cum

FAX #: ________________________________

FROM: John Sugahara

FAX #: 808-885-7851

TOTAL PAGES INCL. COVER PAGE: 2

CALL 885-5941 SHOULD YOU HAVE PROBLEMS WITH THIS TRANSMISSION. MAHALO.

1) Envelope well data requested

2) What is happening on Paia? Will Permits?
Briefly describe the proposed work:

The work to be performed under this permit will consist of drilling, casing and testing a new well.

This permit is intended to provide cooling, make-up and process water for the proposed electrical power production plant at the site. Water will also be used for co-generation aquaculture projects at the site. The estimated maximum capacity requirement is 1100 gpm, which is dependent on the co-generation users demand and aquifer quality.

---

**Walmea Water Services Inc.**

**Enserch Well #1**

Section of Proposed Well

Act to scale Aug. 1996
9. PROPOSED WELL SECTION

Elevation at top of casing: 442 ft. nsl.

Cement GROUT: N/A ft.

Rock Packing: N/A ft.

Net Diameter: 22 in.

Total Depth: 525 ft.

Ground Elevation: 440 ft. msl.

Solid Casing:
- Material: STEEL - NTH A53
- Length: 55 ft.
- Diameter: 16 in.
- Wall thickness: 0.735 in.

Casing:
- Perforated: [ ]
- Material: STEEL - NTH A53
- Length: 20 ft.
- Diameter: 16 in.
- Wall thickness: 0.735 in.
- Openings: [ ]

Open Hole:
- Length: 50 ft.
- Diameter: 13 in.

*Approximate elevation at time of filing application. Ground elevation above mean sea level (m.s.l.) by a surveyor licensed by the State must be submitted at time of construction. Final elevation of well components shall be submitted in the well completion and abandonment reports.
### SECTION 1: WELL LOCATION INFORMATION

<table>
<thead>
<tr>
<th>Island</th>
<th>Hawaii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquifer System</td>
<td>Paaulo</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>E. Mauna Kea</td>
</tr>
<tr>
<td>Proposed Use</td>
<td>industrial</td>
</tr>
<tr>
<td>Proposed Withdrawal</td>
<td>1,500 mdg</td>
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<tr>
<td>System Sustainable Yield</td>
<td>388 mdg</td>
</tr>
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### SECTION 2: WELL SECTION DATA

<table>
<thead>
<tr>
<th>Elevation at top of casing</th>
<th>442 ft., m.s.l.</th>
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</thead>
<tbody>
<tr>
<td>Ground Elevation</td>
<td>440 ft., m.s.l.</td>
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<tr>
<td>Cement Grout</td>
<td>450 ft.</td>
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<tr>
<td>Rock Packing</td>
<td>0 ft.</td>
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<tr>
<td>Hole Diameter</td>
<td>2 in.</td>
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<tr>
<td>Total Depth</td>
<td>625 ft.</td>
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<tr>
<td>Estimated Head</td>
<td>6310 ft., m.s.l.</td>
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<tr>
<td>Calculated Aquifer Thickness</td>
<td>410 ft.</td>
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<tr>
<td>County Water Supply (Y/N ?)</td>
<td>N</td>
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<thead>
<tr>
<th>Solid Casing</th>
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<tbody>
<tr>
<td>Material</td>
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<tr>
<td>Designation</td>
</tr>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Diameter</td>
</tr>
<tr>
<td>Wall Thickness</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Casing</th>
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<tbody>
<tr>
<td>Material</td>
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<td>Diameter</td>
</tr>
<tr>
<td>Wall Thickness</td>
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<tr>
<td>Openings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Open Hole</th>
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</thead>
<tbody>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Diameter</td>
</tr>
</tbody>
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### SECTION 3: CHECKLIST

(values to check are shaded)

<table>
<thead>
<tr>
<th>Well Depth</th>
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<tbody>
<tr>
<td>Theoretical Thickness of Aquifer</td>
</tr>
<tr>
<td>1/4 Aquifer Thickness</td>
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<tr>
<td>Depth of Well below Sea Level</td>
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</table>

<table>
<thead>
<tr>
<th>Well Casing</th>
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</thead>
<tbody>
<tr>
<td>Minimum Wall Thickness</td>
</tr>
<tr>
<td>Material</td>
</tr>
<tr>
<td>County or Non-County</td>
</tr>
<tr>
<td>Minimum Thickness per standards</td>
</tr>
<tr>
<td>Wall Thickness Provided</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minimum Length of Solid Casing</th>
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</thead>
<tbody>
<tr>
<td>90% of ground to top of aquifer</td>
</tr>
<tr>
<td>Length of solid casing Provided</td>
</tr>
</tbody>
</table>

| Casing Material | ASTM A53 | okay (refer to HWCPIS Section 2.4 c) |

<table>
<thead>
<tr>
<th>Annular Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the cell above reads #/NA, reference HWCPIS</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Depth of Grouting</th>
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</thead>
<tbody>
<tr>
<td>Calculated Depth of Grouting</td>
</tr>
<tr>
<td>Depth of Grouting provided</td>
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<tr>
<td>Thickness of Annular Space</td>
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</table>
### Island Code 8, HAWAII

<table>
<thead>
<tr>
<th>Aquifer System Code</th>
<th>Well No.</th>
<th>Well Name</th>
<th>Aquifer Code</th>
<th>Owner/User</th>
<th>Coordinates</th>
<th>Physical Data</th>
<th>Elevations in feet (msl)</th>
<th>Initial</th>
<th>Pump Test Results</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>6528-01</td>
<td>HAINA</td>
<td>80201</td>
<td>HAWAII DWS</td>
<td>1979 200514 1552816 ROT</td>
<td>Casing 12</td>
<td>Total 909</td>
<td>Bott 5</td>
<td>Bott -25</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dia in.</td>
<td>Depth ft.</td>
<td>Solid Perf of</td>
<td>Head ft. (msl)</td>
</tr>
</tbody>
</table>

Well count for the HONOKAA Aquifer System
Well count for Island 1

1, Island of HAWAII
January 17, 1997

To: Ryan Imata, DLNR, Commission on Water Resource Management

From: William Wong, P.E., Chief
Safe Drinking Water Branch

Subject: WELL CONSTRUCTION PERMIT APPLICATION

Thank you for the opportunity to review and comment on the Well Construction Permit Application for:

Enserch #1 Well (Well No. 6528-02)

Federal and state regulations define a public water system as a system that serves 25 or more individuals at least 60 days per year or has at least 15 service connections. All public water system owners and operators are required to comply with Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems.

The application indicates that this will be a new source of potable water. Section 11-20-29 of Chapter 20 requires that all new sources of potable water serving a public water system be approved by the Director of Health prior to its use. Such an approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.

The permit application indicates that the source will be used for potable water. If the well doesn't provide water to a public water system, I recommend the private owner perform bacteriological and chemical analyses prior to usage as a drinking water source and thereafter perform routine analyses to monitor the water quality.

WW:1a

Enclosures
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P. O. BOX 621
HONOLULU, HAWAII 96809

JAN - 7 1997

TO: Honorable Lawrence Miike, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application
Ensench #1 Well (Well No. 6528-02)

Transmitted for your review and comment is a copy of the captioned well 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 January 22, 1997.

Please find a map, attached, 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.

RI:ss
Attachment(s)

RESPONSE: ☒ We have no comments
( ) Comments attached

Contact Person: Lori N. Kajiwara
Phone: 586-4294

Signed: [Signature]
Date: 1/3/97
Mr. John Stubbart, President
Waimea Water Services Inc.
P.O. Box 326
Kamuela, HI 96743

Dear Mr. Stubbart:

Well Construction Permit Application for Well No. 6528-02

We acknowledge receipt, on January 3, 1997, of your completed well construction permit application for the Enserch #1 Well (Well No. 6528-02). You can expect your application to be processed within ninety (90) days from this date.

If you have any questions about your permit application, please contact Mr. Ryan Imata of the Commission staff at 587-0255.

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

RI:ss
TO: Honorable Lawrence Miike, Director
    Department of Health
    Attention: Dennis Tulang, Wastewater Branch
               William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson
      Commission on Water Resource Management

SUBJECT: Well Construction Permit Application
          Ensencherch #1 Well (Well No. 6528-02)

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RI:ss
Attachment(s)

RESPONSE: ( ) We have no comments
           ( ) Comments attached

Contact Person:__________________________  Phone:__________

Signed:_________________________________  Date:____________
TO: Honorable Lawrence Miike, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
             William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson
      Commission on Water Resource Management

SUBJECT: Well Construction Permit Application
         Enserch #1 Well (Well No. 6528-02)

Transmitted for your review and comment is a copy of the captioned well 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 January 22, 1997.

Please find a map, attached, 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: ( ) We have no comments
          (x) Comments attached

Contact Person: William Wong
Phone: 586-4258

Signed: William Wong
Date: Jan. 17, 1997
<table>
<thead>
<tr>
<th>SRC/</th>
<th>COST</th>
<th>PROJECT</th>
<th>PH</th>
<th>ACT</th>
<th>AMOUNT</th>
</tr>
</thead>
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<tr>
<td>00</td>
<td>0752</td>
<td>1026</td>
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<td>(1)</td>
<td>$25.00</td>
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<tr>
<td>TOTAL</td>
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</tr>
</tbody>
</table>

**REMARKS:**

LINE (1) Well No. 6528-02 (WCPA)
LINE (2)
LINE (3)
LINE (4)

---

**Waimea Water Services Inc.**

P.O. Box 325, Kамuela, Hawaii 96743
(808) 885-5941 FAX: (808) 885-7851

---

**PAYMENT**

Twenty-five and 00/100

---

**Check**

Bank of Hawaii
Kamuela Branch, Hawaii 96743

**Check Amount:** 25.00

---

**Check Number:** 3988

---

**Description:** Energy Dept. of Land & Natural Resources Supervisor - Hawke Well
20 Dec. 1996

Mr. Mike Wilson, Chairperson
Commission on Water Resource Management
Dept. of Land and Natural Resources
Division of Water Resources Management
State of Hawaii
P.O.B. 621
Honolulu, Hawaii  96809

ATTENTION:  Rae M. Loui
Deputy Director

SUBJECT:  Well Construction Permit
ENSERCH WELL #1
Honokaa, Hawaii
TMK: 3-4-5-02:23

Dear Mr. Wilson,

We are submitting this well construction permit application on behalf of Encogen Hawaii, L.P. and Hamakua Sugar Co. If there are any questions, please call the undersigned.

Enclosed is a check for $25.00.

Very truly yours,

John Stubbart
President

Enclosures

cc:  Jody Allione
     John Goss
December 17, 1996

Mr. John Stubbart
Waimea Water Services Inc.
P. O. Box 326
Kamuela, HI 96743

Dear Mr. Stubbart:

Please note the signed application and also the change of Company name.

Sincerely,

[Signature]

Jody Allione
Senior Project Development Manager
1. **A) WELL OWNER:**
   - Firm Name: Encogen Hawaii, L.P.
   - Contact Person: Jody Allione
   - Address: 611 Anton Boulevard, # 800

2. **WELL LOCATION:**
   - Island: Hawaii
   - Address: Honokaa, Hawaii
   - Tax Map Key: 6-4-4-02123

3. **A) PROPOSED WORK**
   - [X] Drill New Well
   - [ ] Modify existing well
   - [ ] Install New Pump

4. **PROPOSED PUMP INFORMATION:**
   - Rated Pump Capacity: 1050 gpm
   - Motor: Electric rated horsepower 155

5. **PROPOSED USE**
   - [X] Industrial
   - [ ] Urban
   - [ ] Agriculture
   - [ ] Rural
   - [X] Conservation
   - [ ] Commercial

6. **A) PROPOSED AMOUNT OF WITHDRAWAL:**
   - 1,500,000 gallons per day

7. **PENDING ACTIONS:**
   - [X] CDUA
   - [ ] SMA
   - [ ] EIS
   - [X] NONE

8. **REMARKS:**
   - see Attached Description of work

---

**Well Owner (print):** Encogen Hawaii, L.P.
**Landowner (print):** Hamakua Sugar Co.

**Signature:** [Signature]
**Date:** 1/1/96

**Tradesman:** [Signature]
**Date:** 1/23/96

---

**For Official Use Only:**
- Field Checked By
- Latitude
- Hydrologic Unit
- Date: ____________
- Longitude
- State Well:
Briefly describe the proposed work:

The work to be performed under this permit will consist of drilling, casing and testing a new well.

This permit is intended to provide cooling, make-up and process water for the proposed electrical power production plant at the site. Water will also be used for co-generation aquaculture projects at the site. The estimated maximum capacity requirement is 1100 gpm, which is dependent on the co-generation users demand and aquifer quality.

---

**Enserch Well #1**

Section of Proposed Well

not to scale

Aug. 1996