TO

DATE ____________ TIME ____________

WHILE YOU WERE OUT

M. John Rozett

of ______________________________

Phone 764-8778

<table>
<thead>
<tr>
<th>TELEPHONED</th>
<th>PLEASE CALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALLED TO SEE YOU</td>
<td>WILL CALL AGAIN</td>
</tr>
<tr>
<td>WANTS TO SEE YOU</td>
<td>URGENT</td>
</tr>
</tbody>
</table>

RETURNED YOUR CALL

Message

Kozett called 3489-01

Said they'll send extension request.

Operator
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: LINNEL DATE: JUL - 6 2000 SUSPENSE DATE

TO: INIT. TO: INIT. FOR: PLEASE:

___ BAUER, G. ___ LUM, A. ___ Approval ___ See Me
___ CHING, F. ___ NAKAMA, L. ___ Signature ___ Review & Comment
___ DANBARA, S. ___ NAKANO, D. ___ Information ___ Take Action
___ FUJII, N. ___ NISHIOKA, L. ___ ___ Type Draft
___ HARDY, R. ___ OHYE, M. ___ ___ Type Final
___ HIGA, D. ___ SAKODA, E. ___ ___ File
___ HIRANO, E. ___ SUBIA, S. ___ ___ Xerox ___ copies
___ ICE, C. ___ SWANSON, S. ___
___ IMATA, R. ___ UYENO, D. ___
___ JINNAI, R. ___ YODA, K. ___
PUMP INSTALLATION PERMIT
Rozett Well, Well No. 3489-01

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 Rozett Well (Well No. 3489-01) at Hawaiian Paradise Park, Island of Hawaii, TMK 1-5-35: 81, 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 60 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

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

Date of Approval: June 15, 2000
Expiration Date: June 15, 2002

TIMOTHY E. JOHNS, 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: John P. Rozett
Firm or Title: ROZETT'S NURSERY
Date: 3/28/00

Printed Name: JOHN P. ROZETT

Installer’s Signature: Fred Page
Firm or Title: FRED PAGE DRILLING, INT'L
Date: 3/28/00

Printed Name: FRED PAGE

C-57, C-57a, or A License #: C-166553

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
PRESSURE RELIEF VALVE

SANITARY SEAL

GROUND LEVEL = 275' ABOVE SEA LEVEL

CEMENT GROUT - FROM 270' ABOVE SEA LEVEL (GROUND LEVEL) TO 191' BELOW GROUND

2" GALVANIZED PIPE

6" I.D. STEEL WELL CASING, 0.250 WALL THICKNESS

END CEMENT GROUT 83' ABOVE BOTTOM OF BORE
END GRAVEL PACK 83' ABOVE BOTTOM OF BORE
71' ABOVE TOP OF AQUIFER

GRAVEL PACK 1/4" - 1/2" GRADED/WASHED CRUSHED ROCK

SLOTTED (1B" MACHINE CUT) CASING - 6" I.D. - 0.250 WALL THICKNESS
PUMP INTAKE DEPTH 269.5' TO 14' ABOVE BOTTOM OF BORE

ROZETT'S NURSERY WELL #3489-01

JR 12/20/99
6" I.D. STEEL WELL CASING, 250 WALL
SLOTTED EVERY 3" - 1/8" MACHINE CUT TO 14'

2" GALVANIZED PIPE

2 1/2" STAINLESS STEEL CHECK VALVE

JACUZZI MODEL S460-13 PUMP
RATED AT 50 GPM

GRACED WASHED GRAVEL 1/4"-1/2"

PUMP INTAKE

FRANKLIN 5 HP 230V 3 PHASE 3450 RPM

CASING SHOE H.D.
Mr. John Rozett  
Rozett's Nursery  
HCR 1 Box 5081  
Keeau, HI 96749  

Dear Mr. Rozett:

Enclosed are two (2) originals of your approved Pump Installation Permit for the captioned well(s) that authorize permanent pump installation work for your well(s). As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 11:

**Special Conditions**

1. If the elevation benchmark needs to be altered, the permittee, well operator, and/or well owner shall ensure that the benchmark is transferred (or the well resurveyed) and documentation of the new benchmark shall be submitted to the Commission within sixty (60) days after the pump is installed.

The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the pump installation contractor submits a completed Part II of the Well Completion Report form (enclosed) within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign and have the contractor sign both permit originals and return one for our files. A copy of the Well Completion Report (Part II) and a copy of your water use report form are enclosed for your use.

**IMPORTANT** - Pump installation shall not commence until a fully signed permit is returned to the Commission. Except for the monthly water use report form, please provide copies of all the information in this packet to your pump installation contractor.

Finally, this letter is notice that we have accepted your Well Completion Report - Part I as complete.

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,

TIMOTHY E. JOHNS  
Chairperson

Enclosure
PUMP INSTALLATION PERMIT  
Rozett Well, Well No. 3489-01

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 Rozett Well (Well No. 3489-01) at Hawaiian Paradise Park, Island of Hawaii, TMK 1-5-35: 81, 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 60 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

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

Date of Approval: June 15, 2000  Expiration Date: June 15, 2002

TIMOTHY E. JOHNS, 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
<table>
<thead>
<tr>
<th>TO:</th>
<th>INIT.</th>
<th>TO:</th>
<th>INIT.</th>
<th>FOR:</th>
<th>PLEASE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAUER, G.</td>
<td></td>
<td>CHING, F.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FUJII, N.</td>
<td></td>
<td>HARDY, R.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGA, D.</td>
<td></td>
<td>HIRANO, E.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICE, C.</td>
<td></td>
<td>IMATA, R.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JINNAI, R.</td>
<td></td>
<td>KUNIMURA, I.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LUM, A.</td>
<td></td>
<td>MAKAMA, L.</td>
<td></td>
<td>Approval</td>
<td>See Me</td>
</tr>
<tr>
<td>NAKANO, D.</td>
<td></td>
<td>NAKAMA, L.</td>
<td></td>
<td>Signature</td>
<td></td>
</tr>
<tr>
<td>NISHIOKA, L.</td>
<td></td>
<td>OHYE, M.</td>
<td></td>
<td>Information</td>
<td></td>
</tr>
<tr>
<td>OHYE, M.</td>
<td></td>
<td>SAKODA, E.</td>
<td></td>
<td></td>
<td>Type Draft</td>
</tr>
<tr>
<td>SUBIA, S.</td>
<td></td>
<td>SWANSON, S.</td>
<td></td>
<td></td>
<td>2 Type Final</td>
</tr>
<tr>
<td>UYENO, D.</td>
<td></td>
<td>E-8</td>
<td></td>
<td></td>
<td>5 File</td>
</tr>
<tr>
<td>YODA, K.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Xerox copies</td>
</tr>
</tbody>
</table>

**WELL NUMBER**: 3489-01  
**WELL NAME**: Koott Well

**ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:**
1. COVER LETTER  
2. PERMIT (2x)  
3. PUMP TEST  
4. DOH COMMENTS  
5. LAND DIV. COMMENTS  
6. WCR FORM  
7. SUBJ CHECK  
8. PERMIT  
9. WSR FORM  
10. WUR FORM

**ATTACHMENTS FOR PUMP INSTALLATION PERMIT:**
1. COVER LETTER  
2. PERMIT (2x)  
3. DOH COMMENTS  
4. LAND DIV. COMMENTS  
5. WCR FORM  
6. WUR FORM

TO BE SENT TO APPLICANT
FOR OFFICE USE ONLY

---

X: PUMP INSTALLATION

Not necessary, already installed pump & well submitted. Is that acceptable too?
Dear Mr. Hardy,

At the suggestion of Glenn Bauer I am directing this to your attention. Please find in the following fax a complete copy of the paperwork I mailed to Linnel Nishioka in response to her letter dated 5/19/00. I mailed this package by express mail on 5/25/00 (see attached receipt) in checking with the Post Office, they claim to have delivered it on the morning of 5/26/00. After calling your office and being unable to reach Ryan Imata (on Vacation) Glenn Bauer (off-island) or Linnel Nishioka (not in office). I called back today and spoke with Glenn Bauer, who was kind enough to search for the package to see if it arrived. As he could not locate it, I thought it would be helpful to fax this copy for your reference until the original is located.

Please review the materials as soon as possible and let me know if there is anything further you require. I am anxious to expedite this process, as there have been many delays in the course of this project, and now that it is done I would like to proceed with setting up my above ground tank and service pump for the nursery. The summer months are upon us, and it is becoming more important to have the water system up and running.

Best regards, and mahalo for your assistance in this matter.

John R. Rozett
Owner/Manager Rozett's Nursery
Dear Ms. Nishioka,

In response to your letter of 5/19/00, here is the information you require. I apologize for the delay in reply, between finding an available surveyor, coordinating with my drilling contractor (who is based out of state) for confirmation on the pump test report, and my own tree moving projects which have kept me away from the nursery these last 6 weeks, it has been a little complicated to pull all the pieces together. I am pleased to report that all the required information is attached herein.

1) Elevation Survey- updated on well completion report.
   Elevation at ground at well head. 275.29 ft. msl
   Elevation at flange at top of well casing (sanitary seal) 276.53 ft. msl
   Performed by Niels Christensen Lic # 9077

2) Pump Test Data Report- see enclosed report- Drawdown negligible, Recovery instantaneous

3) Installation of permanent pump, explanation-
   This well has taken 3 years to complete and we were on the verge of having to extend further due to extended delays on the part of my drilling contractor. I had to coerce him to come back in time to finish the project by the permit deadline. I had ordered a pump for the well to be installed after completion, and he said we could use this pump for the test. with all the delays and the project running over budget substantially we decided that after the test was done we would just shut the well down and await your advise on the pump installation permit. We are currently planning on erecting the above ground tank and service pump for the nursery as well as installing permanent electrical connections for the well pump and service pump. Since the summer is almost upon us, I would appreciate any effort you can make on our behalf to expedite the final processing. We are just a small family nursery and depend on the farm for our livelihood.

Once again, I apologize for the delay in response. Please advise me when we may proceed with the system hook-up. I await your reply and am at your service for any questions.

Sincerely,

John R. Rozett  Owner / Manager
# WELL COMPLETION REPORT

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

## WELL CONSTRUCTION REPORT

### PART I.

**3-29-00**  
**Report No.:** 3489-01  
**Well Name:** ROZETT'S NURSERY  
**Island:** HAWAII

1. **State Well No.:** 3489-01  
2. **Location/Address:** 15-1111 28TH ST., KAILUA, HAWAII

### 3. DRILLING COMPANY:

**FRED PAGE DRILLING INTERNATIONAL**

### 4. NAME OF DRILLER WHO PERFORMED WORK:

**FRED PAGE**

### 5. TYPE OF RIG/CONSTRUCTION:

**SIDEWELD 28L CABLE TOOL**

### 6. DATE(S) WELL CONSTRUCTION AND PUMP TESTS (IF ANY) COMPLETED:

12/18/99

### 7. GROUND ELEVATION (REFERENCED TO MEAN SEA LEVEL, MSL):

275.29 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.
---|---|---|---|---|---|---|---
21|\#70 |19 |11' PARCHER FLOW, BUBBLE | 31|19 |76' | GREY LAVA, HARD, SLOPING | 51|17 |66' | OLIVINE LAVA, VOLC. DIFFICULT |
21|\#70 |25 |GREY LAVA, FIRM | 51|17 |66' |OLIVINE LAVA, VOLC. DIFFICULT |

**TOTAL DEPTH OF WELL BELOW GROUND:** 272.5 ft.

**HOLE SIZE:**

- 11\(\text{\textdegree}\) inch dia. from ground ft. to 272.5 ft. below ground
- 11\(\text{\textdegree}\) inch dia. from ground ft. to 272.5 ft. below ground
- 11\(\text{\textdegree}\) inch dia. from ground ft. to 272.5 ft. below ground

**Casing Installed:**

- 6\(\text{\textdegree}\) in. I.D. x 250 in. wall solid section to 258.5 ft. below ground
- 6\(\text{\textdegree}\) in. I.D. x 250 in. wall perforated section to 272.5 ft. below ground

**Casing Material/Slot Size:** STEEL WATER WELL CASING, CERTIFIED (USA)

**Annulus:**

- Grouted from 0 ft. below ground to 197 3/4 ft. below ground
- Gravel packed from 197 ft. below ground to 272.5 ft. below ground

**INITIAL WATER LEVEL:** 261 ft. below ground.

**INITIAL TEMPERATURE:** 72°F

**PUMPING TESTS:**

(1) Step-Drawdown Test Date **NOT REQUIRED**
(2) Long-Term Aquifer Test Date 13/18/99

**Well Drilling Contractor (print):** FRED PAGE DRILLING C-57 Lic. No. C-16653/C-10839

**Surveyor (print):** Niels Christiansen Lic. No. 9077

**Applicant (print):** JOHN ROZETT/ROZETT'S NURSERY

**Date:** 12/21/99  
**Date:** 3-29-00  
**Date:** 12/21/99
### PART II.  
**(PERMANENT) PUMP INSTALLATION REPORT**

20. **Pump Installation Company:**  
   **FRED PAGE DRILLING INTERNATIONAL**

21. **Name of person performing work:**  
   **FRED PAGE**

22. **Date Pump Installation Completed:**  
   **12/18/99**

23. **PUMP INSTALLATION:**
   - **Pump Type, Make, Serial No.:**  
     SAEZI 540-13 9252-00289  
     **Capacity:** 50 gpm
   - **Motor type, H.P., Voltage, rpm:**  
     FRANKLIN GHP 330V 3 PHASE 3450 RMP
   - **Depth of Pump Intake Setting:**  
     269 ft. below ground, which elevation is 270' above ssl ft.
   - **Depth to bottom of intake:**  
     169 ft. below ground, which elevation is 270' above field ft.
   - **Pumping Head is OPEN TO TANK.**
   - **Type of flow meter:**  
     ROCKWELL which measures in GALLONS

24. **As-built drawings attached:**  
   - **Yes**  
   - **No**

25. **Other remarks/comments:**  
   (See below)

---

**Pump Installation Contractor (print):**  
**FRED PAGE DRILLING C-57 Lic. No.:**  
**C-16653/C-10839**

**Signature:**  
**FRED PAGE**

**Date:**  
**12/21/99**

**Applicant (print):**  
**JOHN ROZETTI/ROZETTI'S NURSERY**

**Signature:**  
**JOHN ROZETTI**

**Date:**  
**12/21/99**

---

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/24/99 to 137'</td>
<td>HARD DRILLING A'A CLINNERS</td>
<td></td>
</tr>
<tr>
<td>5/25/99 to 142'</td>
<td>EXTREMELY HARD BLUE ROCK</td>
<td></td>
</tr>
<tr>
<td>7/14/99 to 147'</td>
<td>HARD BLUE ROCK, REMAINING</td>
<td></td>
</tr>
<tr>
<td>7/14/99 to 193'</td>
<td>CONTINUED REMAINING. TO KEEP STRAIGHT</td>
<td></td>
</tr>
<tr>
<td>11/24/99 to 126'</td>
<td>HARD DRILLING</td>
<td></td>
</tr>
<tr>
<td>11/24/99 to 199'</td>
<td>BUILT UP BIT DAILY. VERY CRACKS</td>
<td></td>
</tr>
<tr>
<td>11/24/99 to 203'</td>
<td>STUCK IN HOLE. TARRED FREE</td>
<td></td>
</tr>
<tr>
<td>11/24/99 to 203'</td>
<td>REMAINING. VERY DIFFICULT</td>
<td></td>
</tr>
</tbody>
</table>

18.25. **Remarks:**  
   **SECTIONS OF THIS WELL WERE EXTREMELY HARD DRILLING.**
   **HOLE HAD TO BE REMAINED CONSTANTLY. CEMENTING WAS PERFORMED CONSTANTLY TO HOLD DRILLING FLUID IN THE BORE. THE DRILLING IMPROVED TREMENDOUSLY AT 251' AND REMAINED GOOD THROUGH THE END OF THE HOLE AT 272.5'.
   **WATER TEST WAS EXCELLENT DUE TO VOID ENDURED IN THE BORE BELOW 400', RESULTED IN NEGIGLIBLE DRAWDOWN THROUGHOUT 72 HOURS OF PUMPING AT 50+ GPM. SWL ROSE 4'-6" ABOVE ORIGINAL SWL, DURING FIRST DAY OF TESTING.**
# Long-Term Aquifer Test Data

<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearly 0.01 ft)</th>
<th>Drawdown (unadjusted to nearest 0.01 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (µmhos)</th>
<th>CF (mg/l)</th>
<th>Temp. °F</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>261'</td>
<td>0.00</td>
<td>50</td>
<td>205</td>
<td>72.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>43'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>158</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>247</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 1**

- **Pumped Well No.:** 3489-01
- **Observation well no.:** NONE
- **Pumped Well Name:** Rolette's Nursery
- **Distance between Obs. & Pumped Well:** N.A. ft.
- **Reference pt. for depth to water:** 275.29 ft. msl
- **Static Water Level @ start of test:** 14.29 ft. msl
- **Water level measurements by:**
  - Steel tape
  - Pressure transducer
  - Airline

**START TEST**

- **Date:** 12/18/99
- **Hour of day:** 8:00 AM

**Flow Meter Reading Start:** 06446129 gals

**Data in this table is for:**

- Pumped Well
- Observation Well

**Remarks**
<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.01 ft)</th>
<th>Drawdown (unadjusted to nearest 0.01 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>Temp. °F or °C</th>
<th>Data in this table is for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>305</td>
<td>260.8</td>
<td>.40</td>
<td>50</td>
<td>72 F</td>
<td>Pumped Well</td>
</tr>
<tr>
<td>400</td>
<td>410</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Observation Well</td>
</tr>
<tr>
<td>500</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Remarks</td>
</tr>
<tr>
<td>600</td>
<td>622</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>700</td>
<td>718</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td>802</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>900</td>
<td>900</td>
<td>260.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1500</td>
<td>1513</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2500</td>
<td>2500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3000</td>
<td>3120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Max possible duration,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>water level or quality did</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>not stabilize for any 24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>period</td>
</tr>
<tr>
<td>5000</td>
<td>4320</td>
<td>260.5</td>
<td>.40</td>
<td>50</td>
<td></td>
<td>Begin recovery data</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>next page</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flow meter reading at</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>end of pumped period.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>06/6/3027</td>
</tr>
</tbody>
</table>

**RECOVERY WAS INSTANTANEOUS**

**SUBSEQUENT TRIALS AFTER CONTINUOUS TEST WAS FINISHED ALSO RESULTED IN INSTANTANEOUS RECOVERY.**
<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.01 ft)</th>
<th>Recovery (unadjusted to nearest 0.01 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (µhos)</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td>Start recovery</td>
</tr>
<tr>
<td>1.5</td>
<td>RECOVERY WAS</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

END TEST Date: 12/21/95 Hour of day: 8:05 AM

ADDITIONAL REMARKS:

Person in charge of pump test (print): JOHN ROZET

Signature: [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 aquifer test.

CWRM LTAT Form 1/9/96
2" PRESSURE RELIEF VALVE
SANITARY SEAL
GROUND LEVEL = 275' ABOVE SEA LEVEL

CEMENT GROUT - FROM 270' ABOVE SEA LEVEL (GROUND LEVEL)
TO 197' BELOW GROUND

2" GALVANIZED PIPE

6" I.D. STEEL WELL CASING .250 WALL THICKNESS

END CEMENT GROUT 83' ABOVE BOTTOM OF BORE
END GRAVEL PACK 83' ABOVE BOTTOM OF BORE
71' ABOVE TOP OF AQUIFER

GRAVEL PACK 1/4"-3/8" GRADED/WASHED CRUSHED ROCK

SLOTTED (1/8" MACHINE CUT) CASING - 6" I.D - .250 WALL THICKNESS
PUMP INTAKE DEPTH 269.5'

ROZETT'S NURSERY WELL # 3489-01
JR 12/20/99
6" I.D. STEEL WELL CASING .250 WALL SLOTTED EVERY 3"-1/8" MACHINE CUT TO 14'

2" GALVANIZED PIPE

2 1/2" STAINLESS STEEL CHECK VALVE

JACUZZI MODEL 5460-13 PUMP RATED AT 50 GPM

GRADED WASHED GRAVEL 1/4" - 1/2"

PUMP INTAKE

FRANKLIN 6HP 230V 3 PHASE 3450 RPM

CASING SHOE H.D.
<table>
<thead>
<tr>
<th>ORIGIN (POSTAL USE ONLY)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PO ZIP Code</strong></td>
</tr>
<tr>
<td>85720</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Date in</strong></th>
<th><strong>Mo. Day Year</strong></th>
<th><strong>Time in</strong></th>
<th><strong>Weight</strong></th>
<th><strong>Flat Rate Envelope</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>6/25/06</td>
<td>12 noon</td>
<td>PM</td>
<td>1st Class</td>
<td></td>
</tr>
</tbody>
</table>

**Postage** $11.75

**Return Receipt Fee** $1.25

**Insurance Fee** $0

**Acceptance Confirmation** $1.25

**Total Postage & Fee** $12.50

---

**CUSTOMER USE ONLY**

**METHOD OF PAYMENT**

**FROM:** (PLEASE PRINT)

**TO:** (PLEASE PRINT)

**PHONE:** (306) 944-8778

**PHONE:**

**FROM:** John Rozett

Rozett's Nursery

HCR 1 Box 5081

**TO:** Ms. Linnel T. Nichola

Commission on Water Resource Management

PO Box 621

Honolulu, Ha. 96809

---

**FOR PICKUP OR TRACKING CALL 1-800-222-1811**

www.usps.com
<table>
<thead>
<tr>
<th>TO:</th>
<th>INIT.</th>
<th>TO:</th>
<th>INIT.</th>
<th>FOR:</th>
<th>PLEASE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAUER, G.</td>
<td></td>
<td>LUM, A.</td>
<td></td>
<td>Approval</td>
<td>See Me</td>
</tr>
<tr>
<td>CHING, F.</td>
<td></td>
<td>NAKAMA, L.</td>
<td></td>
<td>Signature</td>
<td>Review &amp; Comment</td>
</tr>
<tr>
<td>DANBARA, S.</td>
<td></td>
<td>NAKANO, D.</td>
<td></td>
<td>Information</td>
<td>Take Action</td>
</tr>
<tr>
<td>FUJI, N.</td>
<td></td>
<td>NISHIOKA, L.</td>
<td></td>
<td></td>
<td>Type Draft</td>
</tr>
<tr>
<td>HARDY, R.</td>
<td></td>
<td>OHYE, M.</td>
<td></td>
<td></td>
<td>Type Final</td>
</tr>
<tr>
<td>HIGA, D.</td>
<td></td>
<td>SAKODA, E.</td>
<td></td>
<td></td>
<td>File</td>
</tr>
<tr>
<td>HIRANO, E.</td>
<td></td>
<td>SUBIA, S.</td>
<td></td>
<td></td>
<td>Xerox copies</td>
</tr>
<tr>
<td>ICE, C.</td>
<td></td>
<td>SWANSON, S.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMATA, R.</td>
<td></td>
<td>UYENO, D.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JINNAI, R.</td>
<td></td>
<td>YODA, K.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KUNIMURA, I.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Got survey & pump data - if ok, we can issue RFP.
WCR 1 Check for Well No. 3489-01 (survey to regulation memo)

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 ◼
   - wellaplic.dbf updated ◼
1. **Pump Tests Check (special condition of PIP? Yes/No)** Glenn Bauer (initial if yes)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   - **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. **Pump Installation Check** Mitch Ohye (initial)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   - data complete □ □
   - followed WCPI Stds □ □
   - wellphys.dbf updated □ □
   - welaplic.dbf updated □ □
Ms. Linnel T. Nishioka  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, HI 96809

Dear Ms. Nishioka,

In response to your letter of 5/19/00, here is the information you require. I apologize for the delay in reply, between finding an available surveyor, coordinating with my drilling contractor (who is based out of state) for confirmation on the pump test report, and my own tree moving projects which have kept me away from the nursery these last 6 weeks, it has been a little complicated to pull all the pieces together. I am pleased to report that all the required information is attached herein.

1) Elevation Survey- updated on well completion report.  
   Elevation at ground at well head. 275.29 ft. msl  
   Elevation at flange at top of well casing (sanitary seal) 276.53 ft. msl  
   Performed by Niels Christensen Lic # 9077

2) Pump Test Data Report- see enclosed report- Drawdown negligible, Recovery instantaneous

3) Installation of permanent pump, explanation-  
   This well has taken 3 years to complete and we were on the verge of having to extend further due to extended delays on the part of my drilling contractor. I had to coerce him to come back in time to finish the project by the permit deadline. I had ordered a pump for the well to be installed after completion, and he said we could use this pump for the test. With all the delays and the project running over budget substantially we decided that after the test was done we would just shut the well down and await your advise on the pump installation permit. We are currently planning on erecting the above ground tank and service pump for the nursery as well as installing permanent electrical connections for the well pump and service pump. Since the summer is almost upon us, I would appreciate any effort you can make on our behalf to expedite the final processing. We are just a small family nursery and depend on the farm for our livelihood.

Once again, I apologize for the delay in response. Please advise me when we may proceed with the system hook-up. I await your reply and am at your service for any questions.

Sincerely,

John R. Rozett  
Owner/Manager
WELL COMPLETION REPORT

1. State Well No.: 3489-01
2. Location/Address: 15-1511 28TH ST, KEAAU, HAWAII

PART I. WELL CONSTRUCTION REPORT

3. Drilling Company: FRED PAGE DRILLING INTERNATIONAL
4. Name of driller who performed work: FRED PAGE
5. Type of rig/construction: BUCYRUS-ERIE 28L CABLE TOOL
6. Date(s) Well Construction and pump tests (if any) completed: 12/18/99
7. GROUND ELEVATION (referred to mean sea level, msl): 275.29
   Well Bench Mark (description/location): FLANGE AT WELL HEAD
   Elevation(msl): 276.63 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.
   214'17 to 19' 11' PANDEKE FLOW, RUBBLE 313'47 to 76' GREY LAVA, HARD, SLOPING
   212'10 to 50' GREY LAVA, FIRM 314'70 to 38' OLIVINE LAVA, Voids, DIFFICULT
   (If more space is needed, continue on back.)
9. Total depth of well below ground: 272.5 ft.
10. Hole size: 11" inch dia. from GROUND to 272.5 ft. below ground
     inch dia. from ft. to ft. below ground
     inch dia. from ft. to ft. below ground

11. Casing installed: 6" in. I.D. x 250 in. wall solid section to 258.5 ft. below ground
     6" in. I.D. x 250 in. wall perforated section to 272.5 ft. below ground
     Casing Material/Slot Size: STEEL WATER WELL CASING, CERTIFIED (USA)

12. Annulus: Grouted from 0 ft. below ground to 197 ft. below ground
     Gravel packed from 197 ft. below ground to 272.5 ft. below ground

13. Initial water level: 261 ft. below ground.
14. Initial chloride: 20.5 ppm
15. Initial temperature: 72 °F

16. PUMPING TESTS: Reference Point (R.P.) used: TOP OF CASING, which elevation is 3.76 ft.
    (1) Step-Drawdown Test Date: NOT REQUIRED
    (2) Long-term Aquifer Test Date: 12/18/99
    Start water level ft. below R.P.
    End water level ft. below R.P.

17. Aquifer Test Procedures data & graphs (1/9/96 LTAT Form) attached? Yes No
18. As-built drawings attached? Yes No
19. Other remarks/comments: (On back of this form)

Well Drilling Contractor (print) FRED PAGE DRILLING C-57 Lic. No. C-16653 / C-10839
Signature ______________________ Date 12/21/99

Surveyor (print) Niels Christiansen Lic. No. 9077
Signature ______________________ Date 3-29-00

Applicant (print) JOHN ROZETT / ROZETT'S NURSERY
Signature ______________________ Date 12/21/99
# PART II.
## (PERMANENT) PUMP INSTALLATION REPORT

20. **Pump Installation Company:**  FRED PAGE DRILLING INTERNATIONAL
21. **Name of person performing work:**  FRED PAGE
22. **Date Pump Installation Completed:**  12/18/99
23. **PUMP INSTALLATION:**
   - **Pump Type, Make, Serial No.:** FACUZZI S460-13 9252-0089  
   - **Capacity:** 50 gpm
   - **Motor type, H.P., Voltage, rpm:** FRAKLIN 5 HP 230V 3 PHASE 3450 RPM 6:15:21
   - **Depth of Pump Intake Setting:** 369 ft. below GROUND, which elevation is 270' above sea level.
   - **Deph to bottom of air line:** 264 ft. below GROUND, which elevation is 270' above sea level.
   - **Pumping Head is Open to tank ft.** Type of flow meter: ROCKWELL which measures in GALLONS
24. **As-built drawings attached attached?**  Yes
25. **Other remarks/comments:**  (See below)

<table>
<thead>
<tr>
<th>Pump Installation Contractor (print)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Applicant (print)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOHN ROZETTI/ROZETTI'S NURSERY</td>
<td>[Signature]</td>
<td>12/21/99</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Dates</th>
<th>Depth (ft)</th>
<th>Rock Description, Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/24/99 to 137'</td>
<td>HARD DRILLING, A'A CLINKERS</td>
<td></td>
</tr>
<tr>
<td>5/24/99 to 142'</td>
<td>EXTREMELY HARD BLUE ROCK</td>
<td></td>
</tr>
<tr>
<td>2/24/99 to 147'</td>
<td>HARD BLUE ROCK, REMING</td>
<td></td>
</tr>
<tr>
<td>7/24/99 to 193'</td>
<td>CONTINUED REMING TO KEEP STRAIGHT</td>
<td></td>
</tr>
<tr>
<td>1/24/99 to 196'</td>
<td>HARD DRILLING</td>
<td></td>
</tr>
<tr>
<td>1/24/99 to 199'</td>
<td>BUILT UP BIT DAILY, VERT. CRACKS</td>
<td></td>
</tr>
<tr>
<td>1/24/99 to 203'</td>
<td>STUCK IN HOLE, JARRED FREE</td>
<td></td>
</tr>
<tr>
<td>1/24/99 to 203'</td>
<td>REMING, VERY DIFFICULT!</td>
<td></td>
</tr>
</tbody>
</table>

19. & 25. **Remarks:**

Sections of this well were extremely hard drilling. Hole had to be reming constantly. Cementing was performed constantly to hold drilling fluid in the bore. The drilling improved tremendously at 251' and remained good through the end of the hole at 272.5'.

Water test was excellent, due to void encountered in the bore below SWL of approx 5-6" resulting in negligible drawdown throughout 72 hours of pumping at 50+ gpm. SWL rose 4-6" above original SWL, during first day of testing.
Long-Term Aquifer Test Data

Pumped Well No. 3489-01  Observation well no. NONE
Pumped Well Name ROZETT'S NURSERY  Distance between Obs. & Pumped Well N.A. ft.
Target Q 50 gpm  Reference pt. for depth to water 275.29 ft. msl

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

START TEST Date: 12/18/99  Hour of day: 8:00 AM

Flow Meter Reading Start: 06446129 gals

<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.01 ft)</th>
<th>Drawdown (unadjusted to nearest 0.01 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (µmhos)</th>
<th>CT (mg/l)</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>261'</td>
<td>0.00</td>
<td>50 gpm</td>
<td>245</td>
<td>72.9°F</td>
<td>Start test</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>158</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>247</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested elapsed time (min)</td>
<td>Actual elapsed time (min)</td>
<td>Depth to water (nearest 0.01 ft)</td>
<td>Drawdown Δ (unadjusted to nearest 0.01 ft)</td>
<td>Pumping rate Q (gpm)</td>
<td>EC (mhos)</td>
<td>Cl⁻ (mg/l)</td>
<td>Temp. °F or °C</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>---------------------------------</td>
<td>--------------------------------------------</td>
<td>----------------------</td>
<td>----------</td>
<td>-----------</td>
<td>----------------</td>
<td>---------</td>
</tr>
<tr>
<td>300</td>
<td>305</td>
<td>260.8</td>
<td>40'</td>
<td>50gpm</td>
<td></td>
<td></td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>400</td>
<td>410</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td>602</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>700</td>
<td>718</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td>802</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>900</td>
<td>900</td>
<td>260.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1500</td>
<td>1513</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2500</td>
<td>2500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3000</td>
<td>3120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5000</td>
<td>4320</td>
<td>260.5</td>
<td>40'</td>
<td>50gpm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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: 06663027 gals.

Use same ending drawdown figure as start for recovery.

RECOVERY WAS INSTANTANEOUS

SUBSEQUENT TRIALS AFTER CONTINUOUS TEST WAS FINISHED ALSO RESULTED IN INSTANTANEOUS RECOVERY.
<table>
<thead>
<tr>
<th>Suggested elapsed time ( t ) (min)</th>
<th>Actual elapsed time ( t ) (min)</th>
<th>Depth to water (nearest 0.01 ft)</th>
<th>Recovery ( r ) (unadjusted to nearest 0.01 ft)</th>
<th>Pumping rate ( Q ) (gpm)</th>
<th>EC (( \mu \text{mhos} ))</th>
<th>Temp. ( {}^{\circ} \text{F} ) or ( {}^{\circ} \text{C} )</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>2.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>60</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>70</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>80</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>90</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>150</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>200</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>250</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Data in this table is for:
- Pumped Well
- Observation Well

Remarks (min) (min)

- 80% recovery achieved
- 80% recovery not achieved

END TEST Date: 12/21/95 Hour of day: 8:05 AM

ADDITIONAL REMARKS:

Person in charge of pump test (print): JOHN ROZETT
Signature: [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 aquifer test.
PRESSURE RELIEF VALVE
SANITARY SEAL
GROUND LEVEL = 270' ABOVE SEA LEVEL

CEMENT GROUT - FROM 270' ABOVE SEA LEVEL (GROUND LEVEL) TO 197' BELOW GROUND

2" GALVANIZED PIPE

6" I.D. STEEL WELL CASING .250 WALL THICKNESS

END CEMENT GROUT 83' ABOVE BOTTOM OF BORE
END GRAVEL PACK 83' ABOVE BOTTOM OF BORE 71' ABOVE TOP OF AQUIFER

GRAVEL PACK 1/4"-1/2" GRADED/WASHED CRUSHED ROCK

SLOTTED (1/8" MACHINE CUT) CASING - 6" I.D. - .250 WALL THICKNESS TO 14' ABOVE BOTTOM OF BORE

PUMP INTAKE DEPTH 269.5'

ROZETT'S NURSERY WELL #3489-01

JR 12/20/99
6" I.D. STEEL WELL CASING, 250 WALL
SLOTTED EVERY 3" - ¼" MACHINE CUT TO 14'

2" GALVANIZED PIPE

2½" STAINLESS STEEL CHECK VALVE

JACUZZI MODEL 5460-13 PUMP
RATED AT 50 GPM

GRADED WASHED GRAVEL ¼" - ½"

PUMP INTAKE - 2641 VOL. FLOW 1377 GPM

FRANKLIN 5HP 230V 3 PHASE 3450 RPM

CASING SHOE H.D.
Mr. John Rozett  
Rozett's Nursery  
HCR 1 Box 5081  
Keeau, HI 96749

Dear Mr. Rozett:

Well Completion Report for Well No. 3489-01

We have not yet received the required items to complete the reporting requirements for your well as described in our letter to you on February 22, 2000. To reiterate, the information we require before we accept your report as complete are as follows:

1. You must have an elevation survey performed by a licensed surveyor per condition 6b of your Well Construction Permit.

2. Please provide pump test data per condition 2 of your Well Construction Permit.

3. It appears you have installed your permanent pump. As described in your permit and its cover letter, you were not to install a pump prior to obtaining a pump installation permit. Please explain why a permanent pump was installed.

You are reminded that use of your pump is not allowed prior to the issuance of a pump installation permit and can be considered a violation of your permit.

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

If you have any questions, 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
**COMMISSION ON WATER RESOURCE MANAGEMENT**

<table>
<thead>
<tr>
<th>FROM: LINNEL</th>
<th>DATE: FEB 10 2000</th>
<th>SUSPENSE DATE</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TO:</th>
<th>INIT.</th>
<th>TO:</th>
<th>INIT.</th>
<th>FOR:</th>
<th>PLEASE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAUER, G.</td>
<td></td>
<td>NAKAMA, L.</td>
<td></td>
<td>Approval</td>
<td>See Me</td>
</tr>
<tr>
<td>CHING, F.</td>
<td></td>
<td>NAKANO, D.</td>
<td></td>
<td>Signature</td>
<td>Review &amp; Comment</td>
</tr>
<tr>
<td>DANBARA, S.</td>
<td></td>
<td>NISHIOKA, L.</td>
<td></td>
<td>Information</td>
<td>Take Action</td>
</tr>
<tr>
<td>FUJI, N.</td>
<td></td>
<td>OHYE, M.</td>
<td></td>
<td>Type Draft</td>
<td></td>
</tr>
<tr>
<td>HARDY, R.</td>
<td></td>
<td>SAKODA, E.</td>
<td></td>
<td>Type Final</td>
<td></td>
</tr>
<tr>
<td>HIGA, D.</td>
<td></td>
<td>SUBIA, S.</td>
<td></td>
<td>File</td>
<td></td>
</tr>
<tr>
<td>HIRANO, E.</td>
<td></td>
<td>SWANSON, S.</td>
<td></td>
<td>Xerox copies</td>
<td></td>
</tr>
<tr>
<td>ICE, C.</td>
<td></td>
<td>UYENO, D.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMATA, R.</td>
<td></td>
<td>YODA, K.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Surveyor?  
2. Possible violation - PIP installed w/o permit.  
3. Pump test (10a)?  
4. Check Unit #6: OK?
Mr. John Rozett  
Rozett's Nursery  
HCR 1 Box 5081  
Keeau, HI 96749

Dear Mr. Rozett:

Well Completion Report for Well No. 3489-01

We have received your Well Completion Report Parts I and II for the Rozett Well (Well No. 3489-01). However, matters which must be addressed before we accept your report as complete are as follows:

1. You must have an elevation survey performed by a licensed surveyor per 6b of your Well Construction Permit.

2. Please provide pump test data per condition 2 of your Well Construction Permit.

3. It appears you have installed your permanent pump. As described in your permit and its cover letter, you were not to install a pump prior to obtaining a pump installation permit. Please explain why a permanent pump was installed.

You are reminded that use of your pump is not allowed prior to the issuance of a pump installation permit and can be considered a violation of your 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 also returning your well completion report to obtain the surveyor's signature.

If you have any questions, 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  
Enclosure
### 1. Pump Tests Check

<table>
<thead>
<tr>
<th>Step-Drawdown Test:</th>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>acceptable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>followed WCPI Stds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>analysis attached</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>proposed pump cap o.k.</td>
<td></td>
<td></td>
<td></td>
</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

<table>
<thead>
<tr>
<th>data complete</th>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>followed WCPI Stds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wellphys.dbf updated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>welaplic.dbf updated</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

How long is that completion date and pump test configuration of well is same as expiration date of permit?
**WCR 2 Check for Well No. 3489-01** (survey to regulation memo)

1. **Pump Tests Check** *(special condition of PIP? Yes/No)*  
   Glenn Bauer ________(initial if yes)  
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th><strong>If no, describe deficiency</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
</tbody>
</table>
   **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. **Pump Installation Check**  
   Mitch Ohye ________(initial)  
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th><strong>If no, describe deficiency</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
</tbody>
</table>
   - data complete ☐ ☐
   - followed WCPI Stds ☐ ☐
   - wellphys.dbf updated ☐ ☐
   - welaplic.dbf updated ☐ ☐
For: Rozett’s Nursery  
HCR 1 Box 5081  
Keaau, HI 96749  

<table>
<thead>
<tr>
<th>Lab No.</th>
<th>Sample Description</th>
<th>Total Coliform MF/100 ml</th>
<th>Chloride mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water Sample Well Water 275 Below Surface 12-28-99</td>
<td>10</td>
<td>20.5</td>
</tr>
</tbody>
</table>

Project Name: Rozett’s Nursery Well  
Sampled by: John Rozett  
Temperature Control: 11°C  
Method: SMWW 20  
Total Coliform: 9222 B, MDL= 1/100 ml  
Chloride: 4500-Cl-C, MDL= 10 mg/L  
Analyzed by: Shana Nagaue  

Received: 12-29-99 @ 07:00  
Analyzed: 12-29-99 @ 09:45  
Completed: 01-03-00
ROZETT'S NURSERY WELL #3489-01
JR 12/20/99
6" I.D. STEEL WELL CASING, 250 WALL
SLOTTED EVERY 3"- 1/8" MACHINE CUT TO 14'

2" GALVANIZED PIPE

2 1/2" STAINLESS STEEL CHECK VALVE

JACUZZI MODEL S460-13 PUMP
RATED AT 50 GPM

GRADED WASHED GRAVEL 1/4"-1/2"

PUMP INTAKE

FRANKLIN 5 HP 230V 3 PHASE 3450 RPM

CASING SHOE H.D.

ROZETT'S NURSERY #3489-01 PUMP DETAIL
Mr. John Rozett  
Pacific Plant Source  
HCR 1, Box 5081  
Keeau, HI  96749

Dear Mr. Rozett:

Well Construction Permit for Well No. 3489-01

This is in response to your letter of December 3, 1998 explaining the delay in construction. Your request for extension of your well construction permit is granted for one year beyond your expiration date. Your new expiration date is December 18, 1999. All other conditions of your permit remain.

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

Aloha,

Michael D. Wilson  
Chairperson
TO     Ryan
DATE 12/6/87  TIME 9:35 a.m.
WILL YOU WERE OUT
Mr. John Boyett
Phone 808 966-8728

<table>
<thead>
<tr>
<th>TELEPHONED</th>
<th>PLEASE CALL</th>
<th>CALLED TO SEE YOU</th>
<th>WILL CALL AGAIN</th>
<th>WANTS TO SEE YOU</th>
<th>URGENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RETURNED YOUR CALL

Message: He told 3/39-01
Wants 2nd extension. Told
him to send in letter
requesting.

Operator: No need

Exhumation - 8/12/87
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: Tim DATE: 12/7 SUSPENSE DATE

TO: BAUER, G. --- LUM, A. --- Approval
   CHING, F. --- NAKAMA, L. --- Signature
   FUJII, N. --- NAKANO, D. --- Information
   HARDY, R. --- OHYE, M. --- [Initial] 12/15/98
   HIGA, D. --- SAKODA, E.
   HIRANO, E. --- SUBIA, S.
   ICE, C. --- SWANSON, S.
   IMATA, R. --- UWAIN, J.
   JINNAI, R. --- UYENO, D.
   JOHNS, T. --- YODA, K.
   KUNIMURA, I.

PLEASE:
   See Me
   Review & Comment
   Take Action
   Type Draft
   Type Final
   File
   Xerox copies

Looks like we got his attention. Any problems elsewhere? If not, sounds like we can extend.
<table>
<thead>
<tr>
<th>TO:</th>
<th>INIT.</th>
<th>TO:</th>
<th>INIT.</th>
<th>FOR:</th>
<th>PLEASE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAUER, G.</td>
<td></td>
<td>LUM, A.</td>
<td></td>
<td>Approval</td>
<td>See Me</td>
</tr>
<tr>
<td>CHING, F.</td>
<td></td>
<td>NAKAMA, L.</td>
<td></td>
<td>Signature</td>
<td>Review &amp; Comment</td>
</tr>
<tr>
<td>FUJII, N.</td>
<td></td>
<td>NAKANO, D.</td>
<td></td>
<td>Information</td>
<td>Take Action</td>
</tr>
<tr>
<td>HARDY, R.</td>
<td>✓</td>
<td>OHYE, M.</td>
<td></td>
<td></td>
<td>Type Draft</td>
</tr>
<tr>
<td>HIGA, D.</td>
<td></td>
<td>SAKODA, E.</td>
<td></td>
<td></td>
<td>Type Final</td>
</tr>
<tr>
<td>HIRANO, E.</td>
<td></td>
<td>SUBIA, S.</td>
<td></td>
<td></td>
<td>File</td>
</tr>
<tr>
<td>ICE, C.</td>
<td></td>
<td>SWANSON, S.</td>
<td></td>
<td></td>
<td>Xerox ___ copies</td>
</tr>
<tr>
<td>IMATA, R.</td>
<td></td>
<td>UWaine, J.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JINNAI, R.</td>
<td></td>
<td>UYENO, D.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOHNS, T.</td>
<td></td>
<td>YODA, K.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KUNIMURA, I.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signed work before signing but at least we got a signed permit now.
Mr. Timothy Johns  
Deputy Director  
Commission on Water Resources  
P.O. Box 621  
Honolulu, Hawaii 96809  

Reference: WELL#3489-01  

Dear Mr. Johns,  

I have received your letter of Nov. 30th, and am sending the enclosed to get us up to date. I was unaware that the permit was not signed and sent in, (that was my mistake) I hired a consultant and a contractor to do the work and assumed they would take care of the details, apparently they didn't. I apologize for this situation and assure you that I will monitor the progress closely from this point forward and ensure that all conditions are met. I will give you a brief synopsis of activities to date:  

February 1997 work begun on well.  

during the subsequent 22 months work occurred in spurts of activity followed by months of lulls, due to my contractor having other obligations and some financial difficulties. We are down to approximately 208' depth at this point. The hole has been covered and secured at all times whenever work was suspended and other than the delays in the drilling schedule the work has gone well and with no unforeseen problems. My Contractor is planning on starting up again this month and we anticipate being done by Spring if all goes well.  

I appreciate your understanding and patience, and assure you that I will get the Contractor's cooperation in providing you with any information you may require. Please approve the permit renewal and apprise me of anything else that you need to proceed.  

Thank you for your attention to this matter, if you have any questions, please feel free to call me at 808-966-8778.  

Thank You,  

John Rozett  
Owner Rozett's Nursery / Pacific PlantSource  
encl: signed well permit
WELL CONSTRUCTION PERMIT

Rozett's Well, Well No. 3489-01

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 Rozett's Well (Well No. 3489-01) at Hawaiian Paradise Park, Island of Hawaii, TMK 1-5-035: 081, subject to the following conditions:

STANDARD PERMIT 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 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 Commission, to accurately record water levels. The permittee shall coordinate with the Commission and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee shall submit to the Commission 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 Commission.

3. 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.

4. 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.

5. 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.

6. The following shall be submitted to the Commission within thirty (30) 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 water quality data.

7. The permittee shall comply with all applicable laws, rules, and ordinances.

8. The well construction permit application and staff submittal approved by the Commission at its December 18, 1996 meeting are incorporated into the permit by reference.

9. 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 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.

10. 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.

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

Date of Approval: December 18, 1996
Expiration Date: December 18, 1998

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.

Applicant's Signature: 
Printed Name: John Rozett
Firm or Title: Rozett's Nursery, Owner

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

Attachment
cc: USGS
Department of Health/ Safe Drinking Water & Wastewater Branches
Hawaii Department of Water Supply
Mr. Timothy Johns  
Deputy Director  
Commission on Water Resources  
P.O. Box 621  
Honolulu, Hawaii 96809  

Reference: WELL#3489-01  

Dear Mr. Johns,  

I have received your letter of Nov. 30th, and am sending the enclosed to get us up to date. I was unaware that the permit was not signed and sent in, (that was my mistake) I hired a consultant and a contractor to do the work and assumed they would take care of the details, apparently they didn't. I apologize for this situation and assure you that I will monitor the progress closely from this point forward and ensure that all conditions are met. I will give you a brief synopsis of activities to date:

February 1997 work begun on well.

during the subsequent 22 months work occurred in spurts of activity followed by months of lulls, due to my contractor having other obligations and some financial difficulties. We are down to approximately 208' depth at this point. The hole has been covered and secured at all times whenever work was suspended and other than the delays in the drilling schedule the work has gone well and with no unforseen problems. My Contractor is planning on starting up again this month and we anticipate being done by Spring if all goes well.

I appreciate your understanding and patience, and assure you that I will get the Contractor's cooperation in providing you with any information you may require. Please approve the permit renewal and apprise me of anything else that you need to proceed.

Thank you for your attention to this matter, If you have any questions, please feel free to call me at 808-966-8778.

Thank You,  

John Rozett  
Owner Rozett's Nursery / Pacific PlantSource

encl: signed well permit
WELL CONSTRUCTION PERMIT

Rozetti's Well, Well No. 3489-01

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 Rozetti’s Well (Well No. 3489-01) at Hawaiian Paradise Park, Island of Hawaii, TMK 6-8-038: 981, subject to the following conditions:

STANDARD PERMIT CONDITIONS

1. The Commission on Water Resource Management (Commission), P.O. Box 821, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work 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 Commission, to accurately record water levels. The permittee shall coordinate with the Commission and conduct a pumping test in accordance with the attached Aquifier Pump Testing Procedure (attached). The permittee shall submit to the Commission 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 Commission.

3. 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.

4. 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.

5. 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.

6. The following shall be submitted to the Commission within thirty (30) 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 water quality data.

7. The permittee shall comply with all applicable laws, rules, and ordinances.

8. The well construction permit application and staff submittal approved by the Commission at its December 18, 1996 meeting are incorporated into the permit by reference.

9. 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 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.

10. 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 13-185-12(f) prior to any well sealing or plugging work.

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

Date of Approval: December 18, 1996
Expiration Date: December 18, 1998

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.

Applicant's Signature: [Signature]
Date: 11/30/98

Printed Name: JOHN ROZETTI
Firm or Title: ROZETTI'S NURSERY, OWNER

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

Attachment

Department of Health/ Safe Drinking Water & Wastewater Branches
Hawaii Department of Water Supply
Mr. John Rozett  
Pacific Plant Source  
HCR 1, Box 5081  
Keeau, HI  96749

Dear Mr. Rozett:

Well Construction Permit for Well No. 3489-01

This is in response to your letter of November 18, 1998 requesting an extension of your well construction permit. We have not yet received a signed copy of your well construction permit, nor have we received written notification of your commencement of work per Standard Condition 1 of your permit. You must address these issues prior to our issuance of an extension.

Further, you were to have submitted your request for an extension no later than three months prior to the date of your permit expiration per Standard Condition 9 of your permit. Therefore, it is imperative that you submit the required information as soon as possible, as we cannot issue an extension of your permit after the expiration date (December 18, 1998). If you do not meet the deadline, you will then need to reapply.

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

Sincerely,  

TIMOTHY E. JOHNS  
Deputy Director 

RI:ss
Dear Mr. Johns,

In Reference to the well permit# listed above for John & Donna Rozett, we have had some difficulties with our contractor’s scheduling on completing the project. He is about 2/3 finished with the bore, but is currently off-island fulfilling other commitments. He is scheduled to return this month, and we expect to move the project along. We have encountered some very dense rock in our drilling, and since he is using a cable rig instead of a pneumatic it is taking longer than expected. I would like to request a one year extension on our permit in order to ensure we have time to complete the project properly.

Thank you for your attention to this matter, if you have any questions, please feel free to call me at 808-966-8778.

Thank You,

John Rozett
Owner Rozett’s Nursery / Pacific PlantSource
<table>
<thead>
<tr>
<th>TO</th>
<th>INIT.</th>
<th>TO</th>
<th>INIT.</th>
<th>FOR</th>
<th>PLEASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAUER, G.</td>
<td></td>
<td>LUM, A.</td>
<td></td>
<td>Approval</td>
<td>See Me</td>
</tr>
<tr>
<td>CHING, F.</td>
<td></td>
<td>NAKAMA, L.</td>
<td></td>
<td>Signature</td>
<td>Review &amp; Comment</td>
</tr>
<tr>
<td>FUJII, N.</td>
<td></td>
<td>NAKANO, D.</td>
<td></td>
<td>Information</td>
<td>Take Action</td>
</tr>
<tr>
<td>HARDY, R.</td>
<td></td>
<td>OHYE, M.</td>
<td></td>
<td></td>
<td>Type Draft</td>
</tr>
<tr>
<td>HIGA, D.</td>
<td></td>
<td>SAKODA, E.</td>
<td></td>
<td></td>
<td>Type Final</td>
</tr>
<tr>
<td>HIRANO, E.</td>
<td></td>
<td>SUBIA, S.</td>
<td></td>
<td></td>
<td>File</td>
</tr>
<tr>
<td>ICE, C.</td>
<td></td>
<td>SWANSON, S.</td>
<td></td>
<td></td>
<td>Xerox copies</td>
</tr>
<tr>
<td>INNAM, R.</td>
<td></td>
<td>UWAIN, J.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOHNS, T.</td>
<td></td>
<td>UYENO, D.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KUNIMURA, I.</td>
<td></td>
<td>YODA, K.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Didn't make March period
East side 30 day period. We should ask his proposal too as I don't see how much he
was requesting for his irrigation (all his pump capacity). We didn't get signed permit either?

Seems like all per application
**WELL COMPLETION REPORT**

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

**WELL CONSTRUCTION REPORT**

1. **State Well No.:** 3481-01  
   **Well Name:** ROZETT'S NURSERY  
   **Island:** HAWAII

### PART I. WELL CONSTRUCTION REPORT

3. **Drilling Company:** FRED PAGE DRILLING INTERNATIONAL
4. **Name of driller who performed work:** FRED PAGE
5. **Type of rig/construction:** BUCHER-SHERG 28L CABLE TOOL
6. **Date(s) Well Construction and pump tests (if any) completed:** 12/18/99
7. **GROUND ELEVATION** (referred to mean sea level, msl): 270 ft.  
   **Well Bench Mark (description/location):** Elevation(msl): _______ ft.
8. **DRILLER'S LOG:** Please attach geologic log (if available or if required by permit)
   - **Depth (ft.):** 21.03 to 19.0  
     **Rock Description:** PAHOEHE FLOW, ROBBLE  
     **Water Level:** 31/24 to 76'  
     **Type of Rig:** BUCHER-SHERG 28L CABLE TOOL  
     **Dale(s):** 12/18/99
9. **Total depth of well below ground:** 273.5 ft.
10. **Hole size:** 11 inch dia. from GROUND  
     **Depth (ft.):** 273.5 ft. below ground
11. **Casing installed:** 4 in. I.D. x 250 in. wall solid section to 258.5 ft. below ground  
     **Casing Material/Slot Size:** STEEL WATER WELL CASING, CERTIFIED (USA)
12. **Gravel packed from:** 0 ft. below ground to 19.7 ft. below ground
13. **Initial water level:** 261 ft. below ground.  
    **Date and time of measurement:** 9/10/99 4:30 PM
14. **Initial chloride:** 20.5 ppm  
    **Date and time of sampling:**
15. **Initial temperature:** 72°F  
    **Date and time of measurement:** 9/18/99 2:00 PM
16. **PUMPING TESTS:**  
    **Reference Point (R.P.) used:** Top of Casing, _______ ft. which elevation is 270 ft.
    **Step-Drawdown Test Date:** NOT REQUIRED  
    **Start water level:** 261 ft. below R.P.
    **End water level:** 260.5 ft. below R.P.
17. **Aquifer Pump Test Procedures data & graphs (1/96 LTAT Form) attached:** Yes
18. **As-built drawings attached:** Yes
19. **Other remarks/comments:** (On back of this form)

---

**Well Drilling Contractor (print):** FRED PAGE DRILLING  
**C-57 Lic. No.:** C-16653/C-10839

**Signature:** FRED PAGE  
**Date:** 12/21/99

**Surveyor (print):**  
**Lic. No.:**

**Signature:**  
**Date:**

**Applicant (print):** JOHN ROZETT/ROZETT'S NURSERY

**Signature:**  
**Date:** 12/21/99
PART II. (PERMANENT) PUMP INSTALLATION REPORT

20. Pump Installation Company: FRED PAGE DRILLING INTERNATIONAL
21. Name of person performing work: FRED PAGE
22. Date Pump Installation Completed: 12/18/99
23. PUMP INSTALLATION:
   Pump Type, Make, Serial No.: JACUZZI S460-13 9252-0089 Capacity: 50 gpm
   Motor type, H.P., Voltage, rpm: FRANKLIN 6HP 330V 3 PHASE 3450 RPM
   Depth of Pump Intake Setting (ft. below GROUND) which elevation is 270' ABESE. ft.
   Depth to bottom of artwork (ft. below GROUND) which elevation is 270' ABOVE GROUND ft.
   Pumping Head is OPEN FANK ft. Type of flow meter: ROCKWELL which measures in GALLONS

24. As-built drawings attached? Yes No
25. Other remarks/comments: See below

Pump Installation Contractor (print) FRED PAGE DRILLING C-57 Lic. No. C-16653/C-10839
Signature Date 12/21/99
Applicant (print) JOHN ROZETT ROZETT'S NURSERY
Signature Date 12/21/99

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

<table>
<thead>
<tr>
<th>Dates</th>
<th>Depth (ft)</th>
<th>Rock Description, Remarks</th>
<th>Dates</th>
<th>Depth (ft)</th>
<th>Rock Description, Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2/16</td>
<td>137</td>
<td>HARD DRILLING A'A CLINKERS</td>
<td>1/13</td>
<td>263</td>
<td>BUILT NEW BIT AND DRILLED 146'-156'</td>
</tr>
<tr>
<td>5/24/97</td>
<td>137</td>
<td>EXTREMELY HARD BLUE ROCK</td>
<td>1/29</td>
<td>263.5</td>
<td>CEASED DRILLING- SHUT TO</td>
</tr>
<tr>
<td>5/24/97</td>
<td>147</td>
<td>HARD BLUE ROCK, REPAIRING</td>
<td>1/30</td>
<td>263.5</td>
<td>TO ASSES OPTIONS- CHANGE TO ROTARY?</td>
</tr>
<tr>
<td>7/16/97</td>
<td>197</td>
<td>CONTINUED DRILLING TO KEEP STRAIGHT</td>
<td>11/19</td>
<td>263.5</td>
<td>RESTARTED DRILLING STILL HARD</td>
</tr>
<tr>
<td>7/1/97</td>
<td>197</td>
<td>HARD DRILLING</td>
<td>11/19</td>
<td>263.5</td>
<td>HARD ROCK, GREEN OXIDE REPAIRING</td>
</tr>
<tr>
<td>11/24</td>
<td>197</td>
<td>BUILT UP BIT DAILY, VERT. CRACKS</td>
<td>11/24</td>
<td>263.5</td>
<td>CHANGE IN ROCK, RED HARD</td>
</tr>
<tr>
<td>11/31/97</td>
<td>207</td>
<td>STICK IN HOLE, JARRED FREE</td>
<td>11/31/97</td>
<td>263.5</td>
<td>HARD FRACTURED ROCK, THEN 3 RED CLAY</td>
</tr>
<tr>
<td>12/16</td>
<td>203.5</td>
<td>REMOVING, VERY DIFFICULT!</td>
<td>12/16</td>
<td>263.5</td>
<td>HIT WATER, DRILLED ON</td>
</tr>
</tbody>
</table>

FINISHED WELL AT 272'6" IN HARD ROCK HIT VOID OF 4'-6" AT 269', NICE FRACKES

19 & 25. Remarks: SECTIONS OF THIS WELL WERE EXTREMELY HARD DRILLING.
HOLE HAD TO BE REMOVED CONSTANTLY. CEMENTING WAS PERFORMED
CONSTANTLY TO HOLD DRILLING FLUID IN THE BORE. THE DRILLING
IMPROVED TREMENDOUSLY AT 251' AND REMAINED GOOD THROUGH
THE END OF THE HOLE AT 272.5.'

WATER TEST WAS EXCELLENT, DUE TO VOID ENCOUNTERED IN
THE BORE BELOW SUL OF APPROX 5'-6" RESULTING IN
NEGIGEABLE ORNADOWN THROUGHOUT 72 HOURS OF PUMPING
AT 50+ GPM, SUL, ROSE 4'-6" ABOVE ORIGINAL SUL, DURING FIRST
DAY OF TESTING.
Mr. John Rozett  
Rozett’s Nursery  
HCR 1 Box 5081  
Keeau, Hawaii 96749

Dear Mr. Rozett:

Well Construction Permit  
Rozett’s Well (Well No. 3489-01)

Enclosed are two (2) originals of your approved Well Construction Permit for the captioned well(s). As part of the Commission’s approval, the following special conditions were added and are part of your permit under Standard Permit Condition 11:

Special Conditions

1. No permanent monitor tube is required.
2. The long-term continuous test shall be at least 72 hours long.
3. No step-drawdown test is required.
4. The well should not be used for drinking water unless it is properly tested and treated.
5. 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 labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water.
6. The cement grout shall be a minimum of 70% of the distance between the ground surface and the top of the aquifer.

Additionally, the Commission authorized the Chairperson to approve and issue a pump installation permit supported by information provided from aquifer pumping test results, required in Well Construction Standard Condition 6e, subject to the Standard Pump Installation Conditions which will be issued to you when we receive your aquifer pump test results and completed Well Construction Report (Part I).

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, submits a completed Part I of the Well Completion Report form (enclosed) and all required testing data within thirty (30) days after the well construction and pump test 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 both enclosed 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 copies of all the information in this packet to your well drilling contractor.

If you have any questions, please call Rae M. Loui, Deputy Director, at 587-0214 or toll-free at 974-400 (Hawaii), 274-3141 (Kauai), 984-2400 (Maui), or 1-800-468-4644 (Lanai & Molokai) extension, 70214.

Aloha,

Michael D. Wilson  
Chairperson

Enclosures
WELL CONSTRUCTION PERMIT

Rozett's Well, Well No. 3489-01

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 Rozett's Well (Well No. 3489-01) at Hawaiian Paradise Park, Island of Hawaii, TMK 1-5-035: 081, subject to the following conditions:

STANDARD PERMIT 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 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 Commission, to accurately record water levels. The permittee shall coordinate with the Commission and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee shall submit to the Commission 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 Commission.

3. 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.

4. 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.

5. 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.

6. The following shall be submitted to the Commission within thirty (30) 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 water quality data.

7. The permittee shall comply with all applicable laws, rules, and ordinances.

8. The well construction permit application and staff submittal approved by the Commission at its December 18, 1996 meeting are incorporated into the permit by reference.

9. 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 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.

10. 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.

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

Date of Approval: December 18, 1996
Expiration Date: December 18, 1998

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.

Applicant's Signature: ___________________________ Date: ______________
Printed Name: ___________________________ Firm or Title: ___________________________

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

Attachment cc:
USGS
Department of Health/ Safe Drinking Water & Wastewater Branches
Hawaii Department of Water Supply
STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

December 18, 1996
Honolulu, Oahu

Rozett's Nursery
APPLICATION FOR WELL PERMITS
Rozett Well (Well No. 3489-01)
Well Construction: 6-inch Casing Diameter, 300-foot Deep Well
Pump Installation: 60 GPM for Nursery Irrigation Use
TMK 1-5-035:081, Puna, Hawaii

APPLICANT:
Rozett's Nursery
HCR 1 Box 5081
Keaau, HI 96749

LANDOWNER:
Rozett's Nursery
HCR 1 Box 5081
Keaau, HI 96749

DESCRIPTION:
Location: (See Exhibit 1) Dimensions: (See Exhibit 2)

BACKGROUND:
On October 4, 1996, a completed well construction/pump installation permit application was received from Rozett's Nursery.

WATER AVAILABILITY:
Pahoa Aquifer System of the Kilauea Sector
Estimated Sustainable Yield: 435 mgd
Current Aquifer System Pumpage (12-MAV as of June 1991): 0.49 mgd
Proposed Use: 0.050 mgd., Nursery Irrigation Use

ISSUES/ANALYSIS:
Agency Review: Copies of the application were sent to the Department of Health's Safe Drinking Water and Wastewater Branches. Additionally, notice of the application was published in the November, 1996 bulletin. No comments or concerns were indicated.

Staff Review: The proposed work includes the drilling and testing of a new 300-foot deep well and the installation of a 60 gpm capacity pump.

AGENDA 1
Item 5
There are no other wells within a mile of the proposed well; however, there are three (3) existing wells in the general vicinity (see Exhibit 1). Two (2) of these wells are unused, and the third is a municipal supply well. No adverse impacts to water resources are anticipated from the drilling activity. Results of the standard pump test should provide information to assess pumpage impacts to other wells in the vicinity.

**RECOMMENDATION:**

A. That the Commission approve the issuance of a well construction permit for Rozett's Well (Well No. 3489-01), subject to the standard conditions in Exhibit 3, and the following special conditions:

1. No permanent monitor tube is required.
2. The long-term continuous test shall be at least 72 hours long.
3. No step-drawdown test is required.
4. The well should not be used for drinking water unless it is properly tested and treated.
5. 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 labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water.
6. The return flow shall be 70% of the discharge from the pumped section and the test.

B. That the Commission authorize the Chairperson to approve and issue a pump installation permit supported by information provided from aquifer pumping test results, required in Well Construction Standard Condition 6e (Exhibit 3), subject to the Standard Pump Installation Conditions in Exhibit 4.

Respectfully submitted,

[Signature]
RAE M. LOUI
Deputy Director

**Exhibit(s):**

1. (Location Map)
2. (Proposed Well Section)
3. (Standard Well Construction Permit Conditions)
4. (Standard Pump Installation Permit Conditions)
5. (Well Completion Report Form)
6. (Pump Test Procedures)
7. (Water Use Report Form)
Ground Elevation: 240 ft., msl

Solid Casing:
- Material: SCHED. 40 PVC
- Length: 300 ft.
- Diameter: 6" in.
- Wall thickness: 1/4 in.

Casing:
- Type: N/A
- Length: N/A ft.
- Diameter: N/A in.
- Wall thickness: N/A in.
- Openings: N/A sq. in./L.F.

Open Hole:
- Length: 30 in.
- Diameter: 6 in.

Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
STANDARD WELL CONSTRUCTION PERMIT 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 by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Commission, to accurately record water levels. The permittee shall coordinate with the Commission and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee shall submit to the Commission 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 Commission.

3. 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.

4. 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.

5. 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.

6. The following shall be submitted to the Commission within thirty (30) 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 water quality data.

7. The permittee shall comply with all applicable laws, rules, and ordinances.

8. The well construction permit application and staff submittal approved by the Commission at its December 18, 1996 meeting are incorporated into the permit by reference.

9. 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 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.

10. 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 3
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 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 a 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 thirty (30) 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 December 18, 1996 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.
# WELL COMPLETION REPORT

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

### WELL CONSTRUCTION REPORT

**C-57 Lic. No.**

<table>
<thead>
<tr>
<th>Part</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>State Well No.: ___________ Well Name: ___________ Island: ___________</td>
</tr>
<tr>
<td>2.</td>
<td>Location/Address: ___________ Tax Map Key: ___________</td>
</tr>
</tbody>
</table>

## PART I. WELL CONSTRUCTION REPORT

3. **Drilling Company:**

4. **Name of driller who performed work:**

5. **Type of rig/construction:**

6. **Date(s) Well Construction and pump tests (if any) completed:**

7. **GROUND ELEVATION** (referred to mean sea level, msl): ___________ ft.
   - Well Bench Mark (description/location):
   - Elevation (msl): ___________ 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.

9. **Total depth of well below ground:** ___________ ft.

10. **Hole size:**
    - ___________ inch dia. from ___________ ft. to ___________ ft. below ground
    - ___________ inch dia. from ___________ ft. to ___________ ft. below ground
    - ___________ inch dia. from ___________ ft. to ___________ ft. below ground

11. **Casing installed:**
    - ___________ in. I.D. x ___________ in. wall solid section to ___________ ft. below ground
    - ___________ in. I.D. x ___________ in. wall perforated section to ___________ ft. below ground
    - Casing Material/Slot Size: ___________

12. **Annulus:**
    - Grouted from ___________ ft. below ground to ___________ ft. below ground
    - Gravel packed from ___________ ft. below ground to ___________ ft. below ground

13. **Initial water level:** ___________ ft. below ground. Date and time of measurement: ___________

14. **Initial chloride:** ___________ ppm Date and time of sampling: ___________

15. **Initial temperature:** ___________ °F Date and time of measurement: ___________

16. **PUMPING TESTS:**
    - Reference Point (R.P.) used: ___________, which elevation is ___________ ft.
    - (1) Step-Drawdown Test Date ___________
    - (2) Long-term Aquifer Test Date ___________
    - Start water level ___________ ft. below R.P.
    - Start water level ___________ ft. below R.P.
    - End water level ___________ ft. below R.P.
    - End water level ___________ ft. below R.P.

17. **Aquifer Pump Test Procedures data & graphs (1/9/96 LTAT Form) attached?**
    - Yes ___________ No ___________

18. **As-built drawings attached?**
    - Yes ___________ No ___________

19. **Other remarks/comments:**
    - (On back of this form)

---

Well Drilling Contractor (print) ___________________________ C-57 Lic. No. ___________

Signature ___________________________ Date ___________

Surveyor (print) ___________________________ Lic. No. ___________

Signature ___________________________ Date ___________

Applicant (print) ___________________________ Date ___________

Signature ___________________________ Date ___________

---

**EXHIBIT #5**
# 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 ________ ft., which elevation is __________ ft.
- Depth to bottom of airline __________ ft. below __________ ft., which elevation is __________ ft.
- Pumping Head is __________ ft.  Type of flow meter: __________ which measures in ________.

24. As-built drawings attached attached?  __Yes__ __No__

25. Other remarks/comments: (See below)

<table>
<thead>
<tr>
<th>Pump Installation Contractor (print)</th>
<th>C-57 Lic. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Applicant (print)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Water Level Dates (ft.)</th>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks,</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water Level Dates (ft.)</th>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks,</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. & 25. Remarks:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

EXHIBIT 5
AQUIFER (PUMP) TEST PROCEDURES

The pump test procedure for new wells shall consist of a step-drawdown test followed by a long-term continuous aquifer test. Testing the well and aquifer in the prescribed manner should result in the hydrologic information needed to determine: 1) the well's performance with regard to yield and water quality (chloride concentration), and 2) the nearby hydraulic properties of the aquifer.

General Recording Requirements

The records required for analysis and the tolerance in measurement acceptable for the step-drawdown and long-term continuous aquifer test are as follows:

1. Discharge from the well shall not fluctuate beyond ± 10 percent.
2. Depth to water measurements in the pumped well shall be accurate to 0.01 feet.
3. Time shall be accurate within ± 1 percent.
4. Water discharged from the well during the step-drawdown and long-term test shall be carried away from the well to a distance sufficient to preclude circulation of the discharge water downward to the ground-water table.
5. Recording of data should be on a form similar to Table 1. All information shown in Table 1 shall be provided. In addition, data shall be plotted on Graph 1 and provided.

Step-Drawdown Test

The purpose of the step-drawdown test is to establish the efficiency of the well and to provide preliminary information on the yield of the well, both from a quantity and quality standpoint.

1. Measurement of water level in the pumped well shall be made every 12 hours for a period of no less than two days prior to the initiation of the step-drawdown test in order to obtain the pretest trend in water levels.
2. The step-drawdown test will consist of continuously pumping the well for four hours at four different rates.
   a. The change from one pumping rate to the next must be sufficient to induce an observable change in water level in the well from the previous pumpage rate.
   b. If desired, the four different rates should represent the full range of pump capacity (if the yield can sustain this), but this is not necessary.
AQUIFER (PUMP) TEST PROCEDURES

3. Each pumping rate should be continued for one hour, after which the new rate should be instituted as rapidly as possible.

4. Pumping should begin at the lowest rate and conclude with the highest rate.

5. Pumping should be continuous through the entire step-drawdown test.

6. Measurement of chloride concentration and temperature of the discharge water shall be measured at least five times:
   a. at the end of each pumping rate during the step-drawdown test, and
   b. at the very beginning of the test.

7. A sufficient number of water level measurements shall be made in the pumped well following the termination of the step-drawdown test to establish that the water level fully recovers from each test to pretest levels.

Long-Term Continuous Test

The purpose of the long-term continuous test is to determine the hydraulic properties of the aquifer to explore for and identify nearby aquifer boundaries such as streams or dikes, and to observe the trend in chloride concentration of the discharge water.

1. The long-term test should not commence until the water level in the pumped well has fully recovered from the step-drawdown test. Generally, the time required for this recovery will be slightly greater than four hours. The water level in the pumped well should be measured immediately before initiation of the long-term test.

2. The pump rate for the long-term test should be sufficient to create an observable drawdown.

3. The test should be run 24 hours per day for at least seven days. If during the test, the water level remains the same for a period of 24 hours, the test can be terminated.

4. Measurement of chloride concentration and temperature of the discharge water during the long-term test shall be made at the beginning of the test and every six hours thereafter.

5. Depth to water in all wells shall be measured with sufficient frequency that each logarithmic cycle in time on the data plots (Graph 1) contains at least 10 data points spread through the cycle. Thus, depth to water should be made at \( t = 0 \) (immediately prior to start of the test), and as close as possible at \( t = 1, 1.5, 2, 2.5, 3, 4, 5, 6, 7, \) and 8 minutes for the first ten minutes and at all succeeding decimal multiples of these numbers to the end of the test \( (t = 10, 15, 20, 25, 30, 40, 50, 60, 70, \) and 80 minutes for the log cycle 10 to 100 minutes, etc.)

6. A sufficient number of water level measurements shall be made in the pumped well following termination of the long-term continuous test to establish that the water level fully recovers from each test to pretest levels.
LONG-TERM AQUIFER TEST DATA

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
Distance between Obs. & Pumped Well __________ ft. msl

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

START TEST Date: ____________ Hour of day: ____________

Flow Meter Reading Start: ____________ gals

<table>
<thead>
<tr>
<th>Suggested elapsed time ( t ) ( \text{min} )</th>
<th>Actual elapsed time ( t ) ( \text{min} )</th>
<th>Depth to water ( s ) ( \text{nearest 0.01 ft} )</th>
<th>Drawdown ( s ) ( \text{unadjusted to nearest 0.01 ft} )</th>
<th>Pumping rate ( Q ) ( \text{gpm} )</th>
<th>EC ( \text{(umhos)} )</th>
<th>CF ( \text{mg/l} )</th>
<th>Temp. ( ^\circ \text{F} ) or ( ^\circ \text{C} )</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start test</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<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>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data in this table is for: □ Pumped Well □ Observation Well
Remarks: __________________________

EXHIBIT 6
<table>
<thead>
<tr>
<th>Suggested elapsed time ( t ) (min)</th>
<th>Actual elapsed time ( t ) (min)</th>
<th>Depth to water ( d ) (nearest 0.01 ft)</th>
<th>Drawdown ( d ) (unadjusted to nearest 0.01 ft)</th>
<th>Pumping rate ( Q ) (gpm)</th>
<th>EC (μmhos)</th>
<th>Cl(^-) (mg/l)</th>
<th>Temp. ( ^\circ F ) or ( ^\circ C )</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Remarks*

Use same ending drawdown figure as start for recovery

*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:

\[ \text{gals} \]

Data in this table is for:
- Pumped Well
- Observation Well

EXHIBIT 6
<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.01 ft)</th>
<th>Recovery (unadjusted to nearest 0.01 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (umhos)</th>
<th>Cl⁻ (mg/l)</th>
<th>Temp. o F or o C</th>
<th>Data in this table is for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Start recovery

END TEST  Date: ___________  Hour 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 aquifer test.

EXHIBIT 6 CWRM LTAT Form 1/9/96
# MONTHELY GROUND WATER USE REPORT

Month of __________, 19__

<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 mean)</th>
</tr>
</thead>
</table>

* - Flow meter, electrical consumption, well 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 pumping amounts are estimated, etc...):
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

Month of _____________ 19__

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 621, Honolulu HI 96806. 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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Use of water code:
A: Agriculture non-irrigation use (livestock, cane wash, etc.)
C: Commercial
D: Domestic
I: Irrigation - Drip
F: 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) ____________________________________________
Signature ____________________________________________ Title _______________________
Date _______________________

EXHIBIT 7

Form mgwdrf.frm (11/96)
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  
         Rozett Well (Well No. 3489-01)

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 November 1, 1996.

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 Roy Hardy of the Commission staff at 587-0274.

RH: ss
Attachment(s)

RESPONSE: ☒ We have no comments  
        ☐ Comments attached

Contact Person: Lori Kajiwara  
Phone: 586-4294

Signed: Lori Kajiwara  
Date: 11/20/96
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  
Rozett Well (Well No. 3482-01)  

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 November 1, 1996.  

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 Roy Hardy of the Commission staff at 587-0274.  

RH:ss  
Attachment(s)  

RESPONSE:  (X) We have no comments  
( ) Comments attached  

Contact Person:  Bill Wong  
Phone:  586-2558  

Signed:  Bill Wong  
Date:  10/18/96
Mr. John Rozett  
HCR 1 Box 5081  
Keaau, HI 96749  

Dear Mr. Rozett:

Well Construction and Pump Installation Permit Application for Well No. 3489-01  

We acknowledge receipt, on October 4, 1996, of your completed well construction and pump installation permit application for the Rozett Well (Well No. 3489-01). 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 Roy Hardy of the Commission staff at 587-0274 or toll-free at 974-4000, extension 70274.

Sincerely,


RAE M. LOUI  
Deputy Director

RH: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  
Rozett Well (Well No. 3489-01)

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 November 1, 1996.

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 Roy Hardy of the Commission staff at 587-0274.

RH:ss  
Attachment(s)

RESPONSE: ( ) We have no comments  
( ) Comments attached

Contact Person: ___________________________ Phone: ________________

Signed: ___________________________ Date: ____________________
<table>
<thead>
<tr>
<th>F YR APPD D SRC/ OBJ</th>
<th>COST CTR</th>
<th>PROJECT</th>
<th>ACT</th>
<th>AMOUNT</th>
<th>NAME/DESCRIPTION (MASTER INPUT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 00 000 C 1026 0752</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rozett's Nursery dba Pacific Planth</td>
</tr>
<tr>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
<td>25.00</td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>25/00</td>
<td></td>
</tr>
</tbody>
</table>

REMARKS:
- LINE (1) Well No. 3489-01 (WCPA/PIPA)
- LINE (2)
- LINE (3)
- LINE (4)

---

ROZETT'S NURSERY
DBA PACIFIC PLANTSOURCE

BANK OF HAWAII
HILO, HAWAII 96721-0807
59-102/1213

PAY TO THE ORDER OF Department of Land and Natural Resources

$25.00

Department of Land and Natural Resources
Comm on water resource mgmt.
P.O. Box 621
Honolulu, Hi. 96809

MEMO Well Application Fee

---

ROZETT'S NURSERY DBA PACIFIC PLANTSOURCE

Office Department of Land and Natural Resources

10/3/96 25.00

Bank of Hawaii Well Application Fee
APPLICATION FOR PERMIT

Well Construction or ☐ Pump Installation

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

APPLICATION FOR PERMIT

Date Accepted: __________
Date Received: __________

1. APPLICANT: (circle primary contact by b, or c)
   (a) WELL OWNER
      Firm Name: ROZETT'S NURSERY
      Contact Person: JOHN ROZETT
      Ph: 966-8778
      Address: HCR 1 BOX 5081, KAAWA, HAWAII, 96749
   (b) LANDOWNER
      Firm Name: JOHN AND DONNA ROZETT
      Contact Person: SAME
      Ph: __________
      Address: __________
   (c) CONTRACTOR
      Firm Name: TO BE SELECTED
      Contact Person: __________
      Ph: __________
      Contractor's C-57 License No.: __________

2. WELL LOCATION/NAME: HAWAIIAN PARADISE PARK
   Island: HAWAII
   Address: PUNA DISTRICT
   (Attach a USGS map, scale 1"=2000', and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK: ☐ Drill New Well ☐ Deepen ☐ Install New Pump
      ☐ Modify Existing Well ☐ Redrill ☐ Modify Pump
      ☐ Abandon/Seal * ☐ Replace Pump
      * Be sure to complete and submit well abandonment report upon completion of work.

(b) WELL TYPE:
      ☐ Dug ☐ Bored ☐ Driven ☐ Drilled ☐ Radial
      Is this well a part of a battery of wells? ☐ Yes ☐ No
      (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 60 gallons per minute
      Motor:
      ☐ Deep Well Turbine ☐ Rotary ☐ Propeller ☐ Diesel
      ☐ Submersible ☐ Rotary-Displacement ☐ Reciprocating ☐ Gas
      ☐ Centrifugal ☐ Rotary-Gear ☐ Impulse ☐ Electric, rated horsepower: 7½ HP
      If Pump Replacement, Existing Pump Capacity: __________ gallons per minute

5. PROPOSED USE:
   ☐ Municipal (including hotels, stores, etc.) ☐ Other (explain)
   ☐ Domestic (individual, noncommercial water users) ☐ Irrigation (crop, etc.) ☐其他 (explain)
   ☐ Industrial ☐ Recreational ☐ Public Services ☐ Others (please specify)
   ☐ Miscellaneous (explain)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: ☐ 50,000 gallons per day
      (b) METHOD OF FLOW MEASUREMENT:
      ☐ Flow-meter ☐ Open-pipe ☐ Orifice Plate ☐ Weir

7. PENDING ACTIONS:
   ☐ COMPLAINT ☐ SMA ☐ EIS ☐ EA ☐ OTHER
   ☐ COMMISSION'S DETERMINATION
   ☐jeta ☐ DRAFDING ☐ OTHER
   Completion Date: __________

8. REMARKS, EXPLANATIONS: IRRIGATION OF NURSERY PLANTS AND FLOWERS

I understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 30 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the proposed capacity of future use; and 5) all work shall be performed in a manner prescribed by the Commission.

Well Owner: __________
Landowner: JOHN ROZETT
Contractor: DONNA ROZETT

Signature: __________
Date: __________

For Official Use Only: Date Received: __________
Date Approved: __________
Field Checked By: __________
Longitude: __________
Latitude: __________
Aquifer System Name: FAJEA
State Well No. __________

10/05/95 WCP Form
8. Remarks, Explanations (cont'd):

9. PROPOSED WELL SECTION

Elevation at top of casing

____ ft., msI.

Cement Grout: 100 ft.

Rock Packing: 200 ft.

Hole Diameter: 10 in.

Total Depth: 300 ft.

Ground Elevation: 240 ft., msI

Solid Casing:

<table>
<thead>
<tr>
<th>Material</th>
<th>SCHED. 40 PVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>300 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>6 in.</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>1/4 in.</td>
</tr>
</tbody>
</table>

Casing: □ Perforated □ Screen

<table>
<thead>
<tr>
<th>Material</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td></td>
</tr>
<tr>
<td>Diameter</td>
<td>N/A</td>
</tr>
<tr>
<td>Wall thickness</td>
<td></td>
</tr>
<tr>
<td>Openings</td>
<td>sq. in. A.F.</td>
</tr>
</tbody>
</table>

Open Hole:

<table>
<thead>
<tr>
<th>Length</th>
<th>30 ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter</td>
<td>6 in.</td>
</tr>
</tbody>
</table>

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msI) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.