EDWCP 6/30/88

CHECKLIST

WELL CONSTRUCTION and PUMP INSTALLATION PERMITS

WELL NAME or LOCATION: KAPALUA WELL NO. 2
WELL NUMBER: 5938-03
OWNER or OPERATOR: Maui Land & Pineapple Co.
ADDRESS: P.O. Box 187
                   Kahului, Maui, Hawaii 96732
TELEPHONE: ________________________

Date application received .................................. 6/19/89
Date acknowledged receipt .................................. 7/1/89
Date of request for more information ......................
Date application accepted ..................................
Suspense date (90 days) ......................................
Date filing fee deposited .................................... 6/28/89

Date sent to DOH for comments ............................ 7/18/89

Date comments received from DOH ......................... 9/18/89 Revised 10/10/89
Date application approved or disapproved ................ 3/27/89 Issued
Date applicant notified of decision ........................

REMARKS: _______________________________________

REvised PERMIT ISSUED: 10/10/89

______________________________
DWS Dated 9/19/89
CHECKLIST

__Well Construction Permit  √Pump Installation Permit
__Water Use Permit Required Also

Well Name & Number  Kapalua 2 (5938-03)  Island  Maui
Applicant  Kapalua Land Co  Landowner  Same
Consultant  Clifford S. Tamile, P.E.

Date application received ........................................ 5/13/93
Date acknowledged receipt/request more info ............ 6/27
Date filing fee deposited ........................................

Application sent to following:  Date sent  Comments received
Dept. of Health  6/24
Office of Hawaiian Affairs  -  
Dept. of Hawaiian Home Lands  -  
State Historic Preservation Div.  6/23
Sierra Club Legal Defense Fund  6/24
Honolulu Board of Water Supply  
Maui Dept. of Water Supply  6/24
Kauai Dept. of Water Supply  
Hawaii Dept. of Water Supply  
Hawaii Dept. of Public Works  
Koolau Loa NR #28 (Oahu)  
Additional List (Molokai)  
Eric Hirano/ Lyann Mizuno  

Date agenda due ...................................................... 6/30/93
Date submittal due .................................................. 6/30/93 DRAFT
Date submittal sent to applicant ................................
Date application __ approved OR __ disapproved .... 7/14/93
Date applicant notified of decision ..............................

Remarks: √Juliana - in acknowledge receipt letter - sent date for pump test data & summary of results  800 gpm
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PUMP INSTALLATION PERMIT

for

Kapalua 2
Well No. 5938-03
Honokahua, Maui

TO:  Kapalua Land Company
      500 Office Road
      Kapalua, HI 96791

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install a pump in Kapalua 2 Well (Well No. 5938-03), for municipal use, is approved subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The permit shall be for installation of an 800 gpm capacity pump in the well.

3. 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 the 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.

4. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a monthly basis and reported to the Commission.

5. The following shall be submitted to the Commission staff within 30 days after completion of the work:
   a. Well Completion Report.
   b. As-built sectional drawing of the installed pump.

6. The applicant shall comply with all applicable laws, rules, and ordinances.
7. The permit application and staff submittal approved by the Commission at its meeting on July 28, 1993 shall be incorporated herein by reference.

8. This permit may be revoked if work is not started within six months of the date of approval or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit approval.

KEITH W. AHUE, Chairperson
Commission on Water Resource Management
JUL 28 1993
Date of Approval

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: Will W. Wilmore
Date: 8/16/93

Printed Name: WILLIAM W. WILMORE

Firm or Title: KAPPOHUI INC.

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

enclosure

c: USGS
Department of Health
Safe Drinking Water Branch
Ground Water Protection Program
Wastewater Branch
Maui Department of Water Supply
PUMP INSTALLATION PERMIT

for

Kapalua 2
Well No. 5938-03
Honokahua, Maui

TO: Kapalua Land Company
500 Office Road
Kapalua, HI 96791

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KEITH W. AHUE, Chairperson
Commission on Water Resource Management
JUL 28 1993
Date of Approval

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 and return one copy of this permit to the Commission and retain a copy for your record.

enclosure
c: USGS
   Department of Health
      Safe Drinking Water Branch
      Ground Water Protection Program
      Wastewater Branch
   Maui Department of Water Supply
July 28, 1993

MEMORANDUM

TO: Rae M. Loui, Deputy Director
Commission on Water Resource Management

FROM: Don Hubbard, Administrator

SUBJECT: Historic Preservation Review of the Well Construction & Pump Installation Permit Applications
Lahaina & Wailea, Maui
TMK: 4-5-21: por. 3; 4-2-01: 1; 2-1-08: 42

We have the following comments on these applications:

1) Lahaina Civic Center (Well No. 5441-02)
   We believe that the proposed well construction will have "no effect" on significant historic sites. The well will be located on lands under sugarcane cultivation and an archaeological survey conducted on these lands for the Lahaina Master Planned Development identified no historic sites.

2) Kapalua Well 2 (Well No. 5938-03)
   It appears that the proposed installation of a new pump will have "no effect" on historic sites. This well already exists and appears to be located at the edge of the pineapple fields. It is unlikely that historic sites exist due to extensive ground disturbance in the area of the well.

3) Wailea Well 6A (Well No. 4026-07)
   We believe that this application for well construction and pump installation will have "no effect" on historic sites. A previous archaeological survey (Cleghorn 1974. Survey and Salvage Excavations in Specified Areas of Wailea Lands, Maui) identified no historic sites in the proposed location of the well and pump.

Should you have any questions about these comments, please contact Annie Griffin at 587-0013.

AG:111
The Honorable Keith W. Ahue, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Ahue:

Well and Pump Applications

Thank you for the opportunity to comment on the following applications:

Maui:
- Lahaina Civic Center (5441-02)
- Kapalua #2 (5938-03)
- Wailea #6A (4026-07)

Kaua'i:
- Aliomanu (0919-04)

Hawaii:
- Hawi #2 (7349-01)
- Kaupulehu (4859-01)

The Department of Hawaiian Home Lands has no objections to these projects.

We note the Anderton application (Aliomanu), with interest, as an opportunity to learn more about the groundwater resource of northeastern Kaua'i, between the Anahola and Moloaa tracts of Hawaiian home lands.

Warmest aloha,

Hoaliiku L. Drake, Chairman
Hawaiian Homes Commission
Mr. Thomas E. Arizumi, P.E., Chief
Environmental Management Division
Department of Health
P.O. Box 3378
Honolulu, HI 96801

Dear Mr. Arizumi:

Preliminary Engineering Report for
Kapalua Water Company Potable Water Wells
(Well Nos. 5938-02, 03)

We have reviewed the preliminary engineering report and have no objections to the proposed project. The applicant has been working with the Commission on Water Resource Management to obtain the necessary well construction and pump installation permits.

Sincerely,

RAE M. LOUI
Deputy Director

ES:ko
Mr. David Craddick, Director  
Department of Water Supply  
County of Maui  
200 South High Street  
Wailuku, Maui, HI 96793

Dear Mr. Craddick:

Well Construction and Pump Installation Permit Application

Please review the following permit application(s) pursuant to your area of concern and submit your comments to us by JUL 16 1993.

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<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at 58-50225.

Sincerely,


/\RAE M. LOUI  
Deputy Director

JZ:ko
Enc.
RE: WELL NOS. 5441-02, 5938-03, 4026-07, 0919-04, 7349-01, and 4859-01

Response:

( ) We have no comments
(x) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: DANA DE SORS/ELLEN KRAFTSOW Phone: 243-7835

Signed: [Signature]

DAVID R. CRADDICK
DIRECTOR OF WATER SUPPLY
COUNTY OF MAUI

Date: 7/14/93

xc: Dana De Sors
xc: Ellen Kraftsow
xc: Ed Kagehiro
xc: Project file
MEMORANDUM

TO: Honorable Hoaliku L. Drake, Director
Department of Hawaiian Home Lands

Mr. Clayton H.W. Hee, Chairman & Trustee At Large
Office of Hawaiian Affairs

FROM: Keith W. Ahue, Chairperson

SUBJECT: Well Construction & Pump Installation Permit Application

Please review the following permit application(s), pursuant to your area of concern and submit your comments to us by JUL 16 1993.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0225.

Enc.

Response:

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: __________________________ Phone: __________

Signed: __________________________ Date: _________
Ms. Marjorie Ziegler  
Sierra Club Legal Defense Fund, Inc.  
212 Merchant Street, Room 202  
Honolulu, Hawaii 96813

Dear Ms. Ziegler:

Well Construction and Pump Installation Permit Application

Please review the following permit application(s) pursuant to your area of concern and submit your comments to us by JUL 16 1993.

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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

JZ:ko  
Enc.
Mr. David Craddick, Director  
Department of Water Supply  
County of Maui  
200 South High Street  
Wailuku, Maui, HI 96793  

Dear Mr. Craddick:

Well Construction and Pump Installation Permit Application

Please review the following permit application(s) pursuant to your area of concern and submit your comments to us by June 24, 1993.

<table>
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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

JZ:ko  
Enc.
Response:

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: ____________________________  Phone: ______________

Signed: ____________________________  Date: ____________
Dear Mr. Arizumi:

Well Construction and Pump Installation Permit Application

Please review the following permit application(s) pursuant to your area of concern and submit your comments to us by JUL 16 1993.

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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

RAE M. LOUI
Deputy Director

JZ:ko
Enc.
Mr. W.W. Wilmore  
Kapalua Land Company  
500 Office Road  
Kapalua, Maui, HI 96791

Dear Mr. Wilmore:

We have received your application and filing fee for a permit to install a pump in Kapalua Well 2 (Well No. 5938-03) at Lahaina, Maui (TMK 4-2-01:1). We are reviewing the application for completeness.

Should you have questions, please call the Commission on Water Resource Management staff at 587-0225.

Sincerely,  

RAE M. LOUI  
Deputy Director

JZ:ko
MEMORANDUM

TO: Dr. Don Hibbard, Director
   Historic Preservation Division

FROM: Rae M. Loui, Deputy Director
       Commission on Water Resource Management

SUBJECT: Well Construction & Pump Installation Permit Application

Please review the following permit application(s) pursuant to your area of concern and submit your comments to us by JUL 15 1993.

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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0225.

JZ:ko
Enc.

Response:

(  ) We have no comments
(  ) We have no objections
(  ) Comments attached
(  ) Additional information requested
(  ) Extended review period requested

Contact Person: ___________________________ Phone: ______________

Signed: ___________________________ Date: ______________
APPLICATION FOR

WELL CONSTRUCTION PERMIT
X PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water Resource Management, P.O. Box 213, Honolulu, Hawaii 96819. Application must be accompanied by a non-refundable filing fee of $35.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 548-1743, Hydrology/Geology Section for assistance.

1. WELL LOCATION

Island MAUI Tax Map Key 4-2-01:1
Address

(Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER

Firm Name KAPALUA LAND COMPANY
Contact Person W.W. WILMORE
Address 500 OFFICE ROAD
KAPALUA MAUI, HAWAII 96791
Phone 669 5565

LANDOWNER

Firm Name KAPALUA LAND COMPANY
Contact Person W.W. WILMORE
Address 500 OFFICE ROAD
KAPALUA MAUI, HAWAII 96791
Phone 669 5565

3. PROPOSED CONTRACTOR FOR: [ ] Well Drilling [ ] Pump Installation

Name ROSCOE MOSS COMPANY-HANAI
Address 91-259A OLAI STREET
Phone 682-5554

Contractor's License No. C-16437

4. PROPOSED WORK

[ ] Drill New Well [ ] Deepen
[ ] Alter [ ] Seal [ ] Replace Pump
[ ] Install New Pump [ ] Replace Pump
[ ] Redrill [ ] Abandon
[ ] Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

[ ] Municipal (including hotels, stores, etc.) [ ] Military
[ ] Domestic (individual, noncommercial water systems) [ ] Industrial
[ ] Irrigation (specify) [ ] Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL 1,520,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type: [ ] Vertical Turbine [ ] Submersible [ ] Centrifugal
Motor: [ ] Diesel [ ] Gas [ ] Electric: 250 [ ] Rated Horsepower
Rated Pump Capacity 800 gallons per minute (gpm)

For Official Use Only:

Field Checked By

Latitude

Hydrologic Unit

Longitude

State Well No.
Briefly describe the proposed work:

The Owner proposes to install a new submersible pump and motor in a recently drilled 14-inch ID well. The pump will have a rated capacity of 800 gpm.

**PROPOSED SECTION OF WELL**
(see attached 11"x17" drawing)

<table>
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<tr>
<th>Elevation at top of casing</th>
<th>ft., msl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elev.</td>
<td>ft., msl*</td>
</tr>
<tr>
<td>Solid Casing:</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>in.</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>in.</td>
</tr>
<tr>
<td>Casing: / /Perforated / /Screen</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td></td>
</tr>
<tr>
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<td>ft.</td>
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<td>in.</td>
</tr>
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<td>in.</td>
</tr>
<tr>
<td>Openings</td>
<td>sq. in./L.F.</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>ft.</td>
</tr>
<tr>
<td>Hole Dia.</td>
<td>in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>ft.</td>
</tr>
</tbody>
</table>

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
PAY TO THE ORDER OF **DEPT. OF LAND AND NATURAL RESOURCES**

CASHIER'S CHECK

**DATE** **May 13, 1993**

**AMOUNT** $25.00**
ATTENTION: MR. EDWIN SAKODA

RE: KAPALUA DEEPWELL NO. 2

PUMP INSTALLATION PERMIT APPLICATION

GENTLEMEN:

WE ARE SENDING YOU [ ] Attached [ ] Under separate cover via ______________________ the following items:

- [ ] Shop drawings
- [ ] Prints
- [ ] Tracings
- [ ] Samples
- [ ] Specifications
- [ ] Copy of letter
- [ ] Change order

<table>
<thead>
<tr>
<th>COPIES</th>
<th>DATE</th>
<th>NO.</th>
<th>DESCRIPTION</th>
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</table>

THese are transmitted as checked below:

- [ ] For approval
- [ ] Approved as submitted
- [ ] Resubmit ___ copies for approval
- [ ] For your use
- [ ] Approved as noted
- [ ] Submit ___ copies for distribution
- [ ] As requested
- [ ] Returned for corrections
- [ ] Return ___ corrected prints
- [ ] For review and comment
- [ ] ______________________

FOR BIDS DUE ______________________ 19 [ ] PRINTS RETURNED AFTER LOAN TO US

REMARKS

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

COPY TO ______________________ SIGNED: [Signature]
State of Hawaii
COMMISSION ON WATER RESOURCE
Department of Land and Natural Resources
Division of Water Resource Management

APPLICATION FOR

- WELL CONSTRUCTION PERMIT
- PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96849. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 516-7312, Hydrology/Geology Section for assistance.

1. WELL LOCATION
Island MAUI Tax Map Key 4-2-01-1
Address ____________________________

(Associate a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER
   Firm Name KAPALUA LAND COMPANY
   Contact Person W.W. WILMORE
   Address 500 OFFICE ROAD
   KAPALUA MAUI, HAWAII 96791
   Phone 669 5565

   LANDOWNER
   Firm Name KAPALUA LAND COMPANY
   Contact Person W.W. WILMORE
   Address 500 OFFICE ROAD
   KAPALUA MAUI, HAWAII 96791
   Phone 669 5565

3. PROPOSED CONTRACTOR FOR:
   Name ROSCOE MOSS COMPANY-HAWAI
   Address 91-259A OLAI STREET
   EWA BEACH, OAHU, HAWAII 96707
   Phone 682-5554
   Contractor's License No. C-16437

4. PROPOSED WORK
   - Drill New Well
   - Alter
   - Install New Pump
   - Deepen
   - Seal
   - Replace Pump
   - Redrill
   - Abandon
   - Modify Pump
   (Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE
   - Municipal (including hotels, stores, etc.)
   - Military
   - Domestic (individual, noncommercial water systems)
   - Industrial
   - Irrigation (specify)
   - Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL 1,152,000 gallons per day

7. PROPOSED PUMP INFORMATION
   Pump Type: Vertical Turbine
   Submersible
   Centrifugal
   Motor: Diesel Gas
   Electric: 250
   Rated Horsepower
   Rated Pump Capacity 800 gallons per minute (gpm)

   Well Owner (print) KAPALUA LAND COMPANY
   Signature ____________________________ Date 3/21/93

   Landowner (print) KAPALUA LAND COMPANY
   Signature ____________________________ Date 3/21/93

   For Official Use Only:
   Field Checked By ____________________________
   Latitude ____________________________
   Hydrology Unit ____________________________
   Longitude ____________________________
   State Well No. ____________________________
Briefly describe the proposed work:

The Owner proposes to install a new submersible pump and motor in a recently drilled 14-inch ID well. The pump will have a rated capacity of 800 gpm.

PROPOSED SECTION OF WELL
(see attached 11"x17" drawing)

Elevation at top of casing ft., msl.
Cement Grout ft.
Hole Dia. in.
Total Depth ft.
Rock Packing ft.

Ground Elev. ft., msl*
Solid Casing:
Material
Length ft.
Diameter in.
Wall thickness in.

Casing: / /Perforated / /Screen
Material
Length ft.
Diameter in.
Wall thickness in.
Openings sq. in./L.F.

Open Hole:
Length
Diameter in.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
Mr. Keith W. Ahue  
Chairperson, Board of Land  
and Natural Resources  
Department of Land & Natural Resources  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Ahue:

SUBJECT: PRELIMINARY ENGINEERING REPORT FOR  
KAPALUA WATER COMPANY POTABLE WATER WELLS  
WELL NOS. 5938-02 AND 5938-03

Transmitted herewith for your review and comments is a copy of the preliminary engineering report for the Kapalua Wells Nos. 5938-02 and 5938-03. This report has been prepared pursuant to Hawaii Administrative Rules, Title 11, Chapter 20, Potable Water Systems, Section 29.

Your review and comments are solicited as your concerns, knowledge, and expertise in this area may assist us in determining potential impacts which may result by the proposed project.

Your early attention and reply to this matter will be greatly appreciated. Please respond by May 14, 1993.

Please return the preliminary engineering report with your comments.

Sincerely,

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

Enclosure
Mr. Manabu Tagomori  
Commission on Water Resource Management  
Department of Land & Natural Resources  
P. O. Box 373  
Honolulu, Hawaii  96809  

Dear Manabu:

Well Completion Report for Kapalua Well No. 2 (5938-03)  
February 10, 1992  
92TN-017 (751-0103)

Enclosed is the Well Completion Report for Kapalua Well No. 2 (State Well No. 5938-03). Its static water level was found to be 5.3 feet above sea level. The pump test was conducted for 72 continuous hours at 780 GPM from September 30 to October 2, 1991. The drawdown of 3.2 feet and chloride concentration of 20 milligrams per liter were stable throughout the test. For comparison, nearby Kapalua Well No. 1 (5938-02) had a static level of 6.8 feet, a drawdown of 1.6 feet at 800 GPM, and a stable chloride concentration of 17 MGL.

Should you have questions or require additional information, please feel free to contact me.

Sincerely,

Tom Nance

TN:It  
cc:  Bill Wilmore

Enclosures
## WELL COMPLETION REPORT

**INSTRUCTIONS:** Please print or type and submit completed report within 30 days of well completion to the Division of Water & Land Development, P.O. Box 373, Honolulu, HI 96809. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-7543, Hydrology, Geology, Section for assistance.

### A. STATE WELL NO. 5938-03  
**WELL NAME:** Kapalua No. 2  
**ISLAND:** Maui

### B. LOCATION  
Above Kapalua Resort

### C. WELL OWNER  
Maii Land & Pineapple Company Inc.

### D. DRILLING OR PUMP INSTALLATION CONTRACTOR  
Richardson Well Drilling

### E. TYPE OF RIG  
Cable Tool  
**DRILLER:** Lee Enloe

### F. DATE OF WELL COMPLETION: November 1991  
**DATE OF PUMP INSTALLATION:**

### G. GROUND ELEVATION (masl): 771.3 ft.  
**Top of Drilling Platform (masl): 774.38 ft.**  
Height of drilling platform above ground surface 3 ft.  
**Bench mark used to determine ground elevation:** 771.33 ft.

### H. TOTAL DEPTH OF WELL BELOW GROUND

### I. HOLE SIZE: 20 inch dia. from 0 ft. to 813 ft. below ground  
**Gravel packed from:** 765 ft. below ground  
**Grouted from:** 813 ft. below ground

### J. Casing Installed:

- **14 in. I.D. x 5/16 in. wall solid section to 773 ft. below ground**
- **14 in. I.D. x 5/16 in. wall perforated section to 813 ft. below ground**  
**Type of perforation:** Punched Louvers (Roscoe Moss Filter-Flow Screen)

### K. Annulus:

- **Grouted from:** 0 ft. to 765 ft. below ground
- **Gravel packed from:** 765 ft. to 813 ft. below ground

### L. Permanent Pump Installation:

- **Pump type, make, serial No.:**
- **Motor type, H.P., voltage, r.p.m.:**
- **Depth of pump intake setting:**
- **Depth of bottom of airline:**
- **Elevation is:**

### M. Proposed Use:  
Potable Supply for Kapalua Water System

### N. Initial Water Level: 769.05 ft. below ground

### O. Initial Chloride: 20 ppm.

### P. Pumping Tests:

| Date | Start water level | End water level | Depth of well | Rate (gpm) | Drawdown (ft.) | Temp. (°F) | Date | Start water level | End water level | Depth of well | Rate (gpm) | Drawdown (ft.) | Temp. (°F) |
|------|-------------------|----------------|---------------|------------|---------------|-----------|------|-------------------|----------------|---------------|------------|------------|---------------|-----------|
| Sept. 30, 1991 | 5.3 ft. below R. P. | 5.3 ft. below R. P. | 813 ft. below R. P. | to | to | | 7-11-91 | to | to | to | to | to |
| 0.0 | 0.5 | 910 | 0.92 | Chlorides | to | | | to | to | to | to | to |
| 0.5 | 1.0 | 920 | 2.23 | to 29 MGL | to | | | to | to | to | to | to |
| 1.5 | 1.5 | 960 | 3.12 | (MACH Kit) | to | | | to | to | to | to | to |
| 1.5 | 2.0 | 910 | 4.90 | Thru Test | to | | | to | to | to | to | to |
| 2.0 | 72.0 | 780 | 3.25 | to | to | | | to | to | to | to | to |

### Q. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level, ft.</th>
<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level, ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0...25</td>
<td>Red clayey soil</td>
<td>733 to 760</td>
<td>Red clayey soil</td>
<td>5938-03</td>
<td></td>
</tr>
<tr>
<td>.25...135</td>
<td>Hard brown clay with</td>
<td>to</td>
<td>Hard blue rock</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>.135...328</td>
<td>gravel and rocks</td>
<td>to</td>
<td>Red-black pahoehe</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>.328...724</td>
<td>Alternating layers of</td>
<td>to</td>
<td>With red cinders</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>.724...760</td>
<td>soft puka rock and</td>
<td>to</td>
<td>to 20° 59' 18'</td>
<td>Longitude 156° 38' 01'</td>
<td></td>
</tr>
<tr>
<td>.760...772</td>
<td>hard blue rock</td>
<td>to</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>.772...813</td>
<td>Predominately soft</td>
<td>to</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>.813...938</td>
<td>puka rock with red</td>
<td>to</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>.938...968</td>
<td>cinders and some hard</td>
<td>to</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>.968...1000</td>
<td>layers</td>
<td>to</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:**

**Submitted by (print):**

**Signature:** Tom Nance

**Title:** President

**Date:** February 11, 1992

**Box 373, Honolulu, HI 96809, An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-7543, Hydrology, Geology, Section for assistance.**
October 10, 1989

Maui Land & Pineapple Company
P.O. Box 187
Kahului, Maui, Hawaii 96732

Gentlemen:

Please replace the well construction permit for Kapalua Well 2 (Well No. 5038-03) issued on September 27, 1988, with the attached permit issued on October 10, 1989. Condition 3 concerning the depth of the created annulus was inadvertently left off the first permit.

Sincerely,

[Signature]
[Deputy Director]

cc: USGS
Department of Health,
Drinking Water Branch
Ground Water Protection Program
Maui Department of Water Supply
TO: Maui Land & Pineapple Company  
P.O. Box 187  
Kahului, Maui, Hawaii 96732

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Well No. 5938-03 within Tax Map Key: 4-2-01:1 for municipal use is approved, subject to the following conditions:

1. The Division of Water and Land Development (DOWALD), Geology-Hydrology Section, shall be notified at 548-7619, before any work covered by this permit commences.

2. The permit shall be for construction and testing only. No permanent pump may be installed and no water used from the well without the necessary pump installation permit from the Commission.

3. The grouted annulus shall be a minimum of from 0 to 500 ft. instead of from 0 to 200 ft. as proposed.

4. The following shall be submitted to DOWALD within 30 days after completion of the well:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) 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 record; including time, pumping rate, drawdown, chloride content, and water quality data.
5. The applicant shall comply with all applicable laws, rules, and ordinances.

6. This permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

OCT 10 1989

Date of Issuance

cc: USGS
    Department of Health,
    Drinking Water Program
    Ground Water Protection Program
    Maui Department of Water Supply

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management
WELL CONSTRUCTION PERMIT

for

Kapalua Well 2
Well No. 5938-03
Honokahua, Lahaina, Maui

TO: Maui Land & Pineapple Company
P.O. Box 187
Kahului, Maui, Hawaii 96732

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   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.
4. The applicant shall comply with all applicable laws, rules, and ordinances.

5. This permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management

SEP 27 1989
Date of Issuance

cc: USGS
Department of Health,
Drinking Water Program
Ground Water Protection Program
Maui Department of Water Supply
September 8, 1989

Mr. William W. Paty, Chairman
Commission on Water Resource Management
Department of Land & Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

RE: Well Construction Permit Application
Kapalua Well #2, State Well 5938-03

With reference to Dr. Lewin's letter dated August 15, 1989 commenting on our application, please be advised that Kapalua Water Company is aware of the State Department of Health regulations governing potable systems and the subsequent licensing requirements.

As you know, KWCo is a PUC regulated public utility and our system presently is fully approved by the Department of Health. The well in question is the second of a system designed to allow KWCo to meet the EPA required Safe Drinking Water Act by 1991. We have been in contact with Mr. Tom Arisumi of the DOH who has indicated a preference for ground water sources for "potable systems."

If you require any additional information regarding our system, please advise.

Very truly yours,

[Signature]
William W. Wilmore
Director of Construction & Facilities Maint.

WWW/jf

c: Ed Sakoda/DLNR
Tom Arisumi/DOH
Gary Gifford
Paul Meyer
Paul Seitz
Tom Nance/BCA
September 8, 1989

Mr. Manabu Tagomori
Deputy Director
Commission on Water Resource Management
STATE OF HAWAII
P. O. Box 621
Honolulu, HI 96809

Attention: Mr. Ed Sakoda

Dear Mr. Tagomori:

Subject: Well Construction Permit Application
Kapalua Well No. 2 (59 38-03)

As a follow-up to our earlier letter and to our phone conversation regarding the aforementioned subject application, please be advised that our concerns and earlier comments have been satisfactorily addressed by the applicant. Therefore, we are pleased to inform you that the Department of Water Supply has no objection to the application and strongly supports Kapalua's well construction permit application.

If you have any questions or require our assistance, please feel free to call me.

Sincerely,

Vince G. Bagoyo, Jr., Director

VGB:t.kc
cc: Mr. William W. Wilmore
Mr. Carl Kaiama

"By Water All Things Find Life"
September 8, 1989

Mr. William W. Paty, Chairman
Commission on Water Resource Management
Department of Land & Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

RE: Well Construction Permit Application
Kapalua Well #2, State Well 5938-03

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If you require any additional information regarding our system, please advise.

Very truly yours,

William W. Wilmore
Director of Construction & Facilities Maint.

WWW/jf

c: Ed Sakoda/DLNR
Tom Arisumi/DOH
Gary Gifford
Paul Meyer
Paul Seitz
Tom Nance/BCA
September 8, 1989

Mau Land & Pineapple Company
P.O. Box 187
Kahului, Maui, Hawaii 96732

Gentlemen:

The Commission on Water Resource Management will be acting on your permit application for Kapalua Well No. 2 at their meeting on September 13, 1989, at 2:00 p.m. Please note that the meeting will take place in Lihue, Kauai, at the State Office Building, Conference Rooms A and B, 3060 Elia Street.

Your application will be included on the agenda as Item 8 (attached).

You or your representative are invited to attend the meeting.

Sincerely,

[NANABU TAGORI]
Deputy Director

ES:br
Attach,
September 6, 1989

Mr. Vince Bagoyo
Director, Dept. of Water Supply
COUNTY OF MAUI
200 So. High Street
Wailuku, Maui, HI 96792

Dear Vince:

RE: Well Construction Permit Application
Kapalua Well No. 2 (5938-03)

With reference to your letter of concern addressed to the Department of Land and Natural Resources, dated August 15, 1989, may we reply to resolve the issues you raise. We will answer each of the four items individually:

1. We have no intention of interfering with the County’s and/or State’s plans to develop a ground water program in the Honokahua-Honolua-Honokahau areas. We believe that our plans locate the wells in accordance with the Maui Water Plan. Therefore we will ask our consultant, Mr. Tom Nance of Belt Collins to design the well location in concert with your engineers and those of DLNR.

2. The proposed well location is in agreement with the Maui Water Plan as it is being written by Mr. Tats Imada. Our understanding is that two wells of approximately 1 mgd capacity are permitted in Sector #2. Any future development by Kapalua would be in Sector #1. This second well is not anticipated to be pumped until perhaps year 2005 as shown in our water use plan. We do need the well now as a standby for Well #1 and because the driller is on site we wish to proceed with Well #2 to save remobilization costs.

3. As stated in Item #2 above we will be in Sector #2 (as defined by Dr. Mink) and the total withdrawals will not exceed the sustainable yields limits as imposed in the Maui Water Plan. therefore we would not damage the aquifer. In any event, we are as sensitive as you are to retain the integrity of the aquifer.
4. We do not intend to use this well, nor the water from Well #1 for irrigation use. We have adequate surface water for this purpose. Please refer to the Maui Water Plan which discusses the purpose of these wells, i.e., to provide potable water to the Kapalua Water Company system to meet the EPA Safe Drinking Water requirements.

In light of all of the above discussion, please be assured that Maui Land & Pineapple Company, Kapalua Land Company and Maui Pineapple Company have always and will continue to manage our water resources in such a manner to conserve the water sources and utilize water in the best interests of Maui County.

We request that you advise DLNR that we may proceed with our program and ask them to grant the permit. If I have omitted any information that might cause you concern, please advise.

Very truly yours,

[Signature]
William W. Wilmore
Director of Construction & Facilities Maint.

WWW/jf

c: Ed Sakoda/DLNR
    Gary Gifford
    Paul Meyer
    Paul Seitz
    Tom Nance/BCA
श्री रामराज के बारे में
August 15, 1989

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

SUBJECT: WELL CONSTRUCTION PERMIT APPLICATION
KAPALUA WELL NO. 2
STATE WELL NO. 5938-03
KAPALUA, MAUI

Thank you for the opportunity to review the subject document. We have reviewed the application and have the following comments to offer:

1. The application indicates that the wells will be for municipal use. If the well is to serve 25 or more individuals at least 60 days per year or will have a minimum of 15 service connections, the applicant will be required to comply with the Department's Administrative Rules, Title 11, Chapter 20, "Potable Water Systems."

2. Section 11-20-29 of Chapter 20 requires that a new source of potable water serving a public water system be approved by the Director of Health prior to its use. Such an approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.
The Honorable William W. Paty  
Page 2  
August 15, 1989

If you should have any questions, please contact the Safe Drinking Water Branch at 548-2235.

Very truly yours,

[Signature]

JOHN C. LEWIN, M.D.  
Director of Health

cc:  Mr. Bill Wilmore  
Maui Land and Pineapple Company  
P.O. Box 187  
Kahului, Maui, HI 96732
COUNTY OF MAUI
200 SOUTH HIGH STREET
MAILUKU, MAUI, HAWAII 96793
Fax No. (808) 243-7870

TRANSMITTAL SHEET

Mr. Ed. Sakoda

TO: Division of Water and Land Development
Vince G. Bagoya Jr., Director

FROM: Department of Water Supply
Kamehameha (14398-81)

SUBJECT: Kapalua Well No. 2 (5935-03)
Well Construction Permit Applications

DATE: 7/15/89

PAGES: 5 (including this transmittal page)

If you have not received all the pages, call Carl Kanawa
at (808) 243-7835

REMARKS: 
August 15, 1989

Mr. Manabu Tagomori  
Deputy Director  
Commission on Water Resource Management  
State of Hawaii  
P. O. Box 621  
Honolulu, HI  96809

Dear Mr. Tagomori:

Subject: Well Construction Permit Application  
Kamaole Well (4325-01)

We have no objection to this application provided there is assurance that the use of this source is for irrigation of Jojola farming only and will not threaten or impact other existing wells below it.

Sincerely,

[Vince's signature]

Vince G. Bagoyo, Jr., Director  
Department of Water Supply

VGB/ck/af

cc: Engineering

"By Water All Things Find Life"
August 15, 1989

Mr. Manabu Tagomori
Deputy Director
Commission on Water
Resource Management
State of Hawaii
P. O. Box 621
Honolulu, HI 96809

Dear Mr. Tagomori:

Subject: Well Construction Permit Application
Kapalua Well No. 2(5938-03)

We are deeply concerned over the potential impact the planned well by Maui Land & Pineapple Company, Inc. (ML&P Co.) and the Department of Water Supply’s (DWS) proposed groundwater source development program in the Honokahua to Honolua areas may have upon each other. As shown on the enclosed map, the proposed DWS groundwater source will be below the planned well of ML&P Co.; and, though DWS has not started development of this source, it originally proposed this site in 1980 for future source development.

Before the State Commission Water Resource Management grants ML&P Co. a well construction permit, there needs to be some assurance that:

1. ML&P Co.'s existing, planned and proposed well(s) will not prevent DWS from proceeding with its groundwater source development program as proposed at Honokahua to Honolua;
2. There is adequate water supply for all proposed developments;
3. The quality of the aquifer will not be degraded or threatened in any way;

“By Water All Things Find Life”
Mr. Manabu Tagomori
Page Two
August 15, 1989

4. Water supply not to be used for golf irrigation.

Thank you for allowing us to review the application and submit comments.

Sincerely,

[Vince G. Bagby, Jr., Director]
[Department of Water Supply]

VGB/ck/af
Enclosure
cc: Engineering
SURVEY BRANCH
Division of Water Resource Management

FROM: Ed
DATE: 8/14/89
FILE IN: Kapalua Well No. 2 (5938-03)

TO: INITIAL:
D. LUM
E. Sakoda
D. Nakano
P. Haraguchi
W. Rozeboom
R. Jinnai
M. Ohye

D. Hamada
K. Oshiro
M. Tagomori
G. Matsumoto
G. Akita
L. Chang
S. Kokubun
Y. Shiroma

PLEASE:
See Me
Call
Review & Comment
Take Action
Investigate & Report
Draft Reply
Acknowledge Receipt
Type Draft
Type Final
Xerox copies
File
Mail

REMARKS:
I called Carl Kaimana today re: Kapalua Well No. 2 which is on the agenda for Aug. 16. Maui DWS has plans to develop 4 wells in the same area at a 600' elev. (Damgradient). DWS feels 6th Kapalua Wells 142 will impact their proposed sources. They plan to start drilling the wells in @ 1993 according to Carl. They will try to FAX a map of their proposed wells and an accompanying letter to us by tomorrow (Tuesday 8/15). Since they don't plan to start drilling until 1993 — I can't see any reason to take action or recommend disapproval.

FOR YOUR INFORMATION

Ed
SURVEY BRANCH
Division of Water Resource Management

FROM: Ed
DATE: 8/14/89
FILE IN: Kapalua Well No. 2 (5738-03)

O: INITIAL: P: INITIAL: REMARKS:

1 D. LUM

PLEASE:

See Me
Call
Review & Comment
Take Action
Investigate & Report
Draft Reply
Type Draft
Type Final
Xerox
File
Mail

I called Carl Kacina today re: Kapalua
Well No. 2 which is on the agenda for
Aug. 16. Maui DWS has plans to
develop 4 wells in the same
area at 600' elev. (approximately)
of proposal Kapalua 2). DWS feels
both Kapalua Wells 1 & 2 will support
their proposed sources. They plan to
start drilling the wells in @ 1993
according to Carl. They will try to FAX a map of their
proposed wells and an accompanying letter to us by tomorrow
(Tuesday 8/15). Since they don't plan to start drilling until 1993, I can't
see any reason to defer action or recommend disapproval.

L

D. Lum

E. Sakoda
D. Nakano
P. Haraguchi
W. Rozeboom
R. Jinnai
M. Ohye

D. Hamada
K. Oshiro
M. Tagomori
G. Matsumoto
G. Akita
L. Chang
S. Kokubun
Y. Shiroma

FOR YOUR

Approval
Signature
Information

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proposed wells and an accompanying letter to us by tomorrow
(Tuesday 8/15). Since they don't plan to start drilling until 1993, I can't
see any reason to defer action or recommend disapproval.
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: ___________ DATE: ___________ FILE IN: ___________

TO: INITIAL: PLEASE: REMARKS:

M. TAGOMORI  See Me
D. Lum  Take Action By
G. Matsumoto  Route to Your Branch
G. Akita  Review & Comment
L. Chang  Draft Reply
Y. Shiroma  Acknowledge Receipt
E. Sakoda  Xerox copies
D. Nakano  File
W. Rozeboom  Mail
P. Haraguchi  For Information
S. Samuels  S. Kokubun
R. Chung  D. Hamada
T. Kam  L. Nanbu
A. Monden  F. Ching
H. Young  M.T. & D. McConnell
R. Suzuki  Director, Public Works
N. Kaneshiro  MT. & D. McConnell
T. Nakama  Director, Public Works

Please check.

MT. & D. McConnell
August 15, 1989

Mr. Manabu Tagomori
Deputy Director
Commission on Water Resource Management
State of Hawaii
P. O. Box 621
Honolulu, HI 96809

Dear Mr. Tagomori:

Subject: Well Construction Permit Application
Kapalua Well No. 2(5938-03)

We are deeply concerned over the potential impact the planned well by Maui Land & Pineapple Company, Inc. (ML&P Co.) and the Department of Water Supply's (DWS) proposed groundwater source development program in the Honokahua to Honolua areas may have upon each other. As shown on the enclosed map, the proposed DWS groundwater source will be below the planned well of ML&P Co.; and, though DWS has not started development of this source, it originally proposed this site in 1980 for future source development.

Before the State Commission Water Resource Management grants ML&P Co. a well construction permit, there needs to be some assurance that:

1. ML&P Co.'s existing, planned and proposed well(s) will not prevent DWS from proceeding with its groundwater source development program as proposed at Honokahua to Honolua;

2. There is adequate water supply for all proposed developments;

3. The quality of the aquifer will not be degraded or threatened in any way;

"By Water All Things Find Life"
4. Water supply not to be used for golf irrigation.

Thank you for allowing us to review the application and submit comments.

Sincerely,

[Signature]

Vince G. Bagby, Jr., Director
Department of Water Supply

VGB/ck/af

Enclosure

cc: Engineering
August 11, 1989

Paul Land & Pineapple Company
P.O. Box 187
Hilo, Hi, Hawaii 96723

Gentlemen:

The Commission on Water Resource Management will be acting on your permit application for Kapalua Well No. 2 at their regularly scheduled meeting on August 16, 1989, at 2:00 p.m. in Board Room 132, 1151 Punchbowl Street, Honolulu.

Your application will be included on the agenda as Item 9 (attached).

You or your representative are invited to attend the meeting.

Sincerely,

[Signature]

KANAMU TAGUCHI
Deputy Director

File
Attach.
Honorable John C. Lewin, M.D.
Director of Health
Department of Health
1250 Punchbowl Street
Honolulu, Hawaii 96813

Attention: Mr. Thomas Arizumi, Drinking Water Program

Dear Dr. Lewin:

Well Construction Permit Applications

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168-17(c), we are sending you a copy of the following permit applications:

- Huehue Ranch Wells 2 & 3 (4459-01 & 4556-01)
- MacFarms Wells 2 & 3 (0951-01 & 0852-01)
- Neesia-Estrela Well (2648-01)
- Ewa Golf Course Irrigation Wells 1 to 5 (1901-03, 1900-17 to 20)
- Kameole Well (4325-01)
- Kapalua Well No. 2 (5038-03)

Please submit your comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Kaoru Tagomori at 548-7533.

Very truly yours,

WILLIAM W. PATY

Encl.
July 13, 1989

Honorable Vince Bagoyo, Director
Department of Water Supply
County of Maui
200 S. High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Bagoyo:

Well Construction Permit Applications

We are sending you a copy of the following permit applications for your review and comments:

Kamaole Well (4325-01)
\Kapalua Well No. 2 (5938-03)

Please submit your comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Dan Lum at 548-7643.

Sincerely,

[Signature]

MANABU TAGOMORI
Deputy Director

Enc.
July 16, 1980

Maui Land & Pineapple Co., Inc.
P.O. Box 187
Kahului, Maui, Hawaii 96732

Gentlemen:

We acknowledge receipt of your application and $25.00 filing fee to construct a well for municipal use at Tax Key: 4-2-01:1, Honokahua, Lahaina, Maui.

My staff is processing the application and will contact you should there be any questions.

Sincerely,

[Signature]

HANABU TAGOMORI
Deputy Director

ES:br1
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<th>TO:</th>
<th>INITIAL:</th>
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<td>D. Lum</td>
<td>See Me</td>
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<td>G. Matsumoto</td>
<td>G. Akita</td>
<td>Take Action By</td>
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<td>L. Chang</td>
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<td>Route to Your Branch</td>
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<td>D. Nakano</td>
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<td>R. Chung</td>
<td>For Information</td>
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<td>N. Kaneshiro</td>
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<td>T. Nakama</td>
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**FILE IN:** KAPAPA WAT 062
APPLICATION FOR

WELL CONSTRUCTION PERMIT
PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 548-7162. Hydrology/Geology Section for assistance.

1. WELL LOCATION
Island Maui Tax Map Key 4-2-01:1
Address
(Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER
Firm Name Maui Land & Pineapple Co., Inc.
Contact Person Bill Wilmore
Address P. O. Box 187
Kahului, Maui, Hawaii 96732
Phone 669-5622

Firm Name Maui Land & Pineapple Co., Inc.
Contact Person Bill Wilmore
Address P. O. Box 187
Kahului, Maui, Hawaii 96732
Phone 669-5622

3. PROPOSED CONTRACTOR FOR:

- Well Drilling
- Pump Installation

Name Richardson Well Drilling
Address P. O. Box 4477
Kona, Hawaii 96740
Phone 1-329-2678
Contractor's License No. C-12552

4. PROPOSED WORK

- Drill New Well
- Alter
- Install New Pump
- Deepen
- Seal
- Replace Pump
- Redrill
- Abandon
- Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

- Municipal (including hotels, stores, etc.)
- Military
- Domestic (individual, noncommercial water systems)
- Industrial
- Irrigation (specify)
- Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL 1,000,000 gallons per day

7. PROPOSED PUMP INFORMATION

- Pump Type: Vertical Turbine
- Submersible
- Centrifugal
- Motor: Diesel
- Gas
- Electric: 250 Rated Horsepower
- Rated Pump Capacity 700 gallons per minute (gpm)

Signature x ____________________________ Date 12/15/98 Exec. V.P./Resort

Signature x ____________________________ Date ____________________________ Exec. V.P./Resort

For Official Use Only:

Field Checked By ____________________________ Latitude ____________ Hydrologic Unit ____________
Date ____________________________ Longitude ____________ State Well No. 5938-03
Briefly describe the proposed work:

Richardson well drilling is in the process of constructing Kapalua Well No. 1.

Upon completion, the Contractor would move to the site of Well No. 2 for drilling, casing installation, and pump testing.

---

**PROPOSED SECTION OF WELL**

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevation at top of casing</td>
<td>762 ft., msl</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>200 ft.</td>
</tr>
<tr>
<td>Hole Dia.</td>
<td>20 in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>835* ft.</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>595 ft.</td>
</tr>
<tr>
<td>Solid Casing:</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>ASTM A-283</td>
</tr>
<tr>
<td>Length</td>
<td>757 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>14 in.</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>0.375 in.</td>
</tr>
<tr>
<td>Casing: /X/Perforated / /Screen</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>ASTM A-283</td>
</tr>
<tr>
<td>Length</td>
<td>40 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>14 in.</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>0.375 in.</td>
</tr>
<tr>
<td>Openings</td>
<td>80 sq. in./L.F.</td>
</tr>
<tr>
<td>Open Hole: (Optional)</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>40</td>
</tr>
<tr>
<td>Diameter</td>
<td>13 in.</td>
</tr>
</tbody>
</table>

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
PERMIT FEE FOR SECOND WELL AT KAPALUA FOR MAUI LAND & PINEAPPLE CO

KAPALUA WELL NO. 2 (5938-03)

MAUI PINEAPPLE COMPANY, LTD.

IN PAYMENT OF ITEMS LISTED ABOVE, IF INCORRECT PLEASE NOTIFY US AT ONCE.

DATE 6/14/89  CHECK NO. 042064
PAY $25.00*

TO THE ORDER OF

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
FILING FEE : KAPALUA WELL NO. 2 (5938-03)
PROJECT AREA

HONOKOHAU

LAHAINA

OLOWALU

WAILUKU

KAHULUI

KIHEI

MAKENA

ULUPALAKUA

PAUAWAO

PAIA

KEANA

HANA

Haleakala

NORTH

SCALE IN MILE

ISLAND OF MAUI