1. STATE WELL NO. 5825-03
2. LOCATION: Address
3. DRILLING OR PUMP INSTALLATION CONTRACTOR N/A
4. CONTRACTOR'S C-57 LICENSE NUMBER 9627
5. NAME OF DRILLER WHO PERFORMED WORK N/A
6. TYPE OF RIG/CONSTRUCTION N/A
7. DATE OF WELL DRILLING COMPLETION N/A

8. GROUND ELEVATION (m.a.s.l.) 472.44 ft.

9. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks, Dates</th>
<th>Water Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 65</td>
<td>Dirt</td>
<td>0</td>
</tr>
<tr>
<td>65 - 110</td>
<td>Rock</td>
<td>62.0</td>
</tr>
<tr>
<td>110 - 140</td>
<td>Hard material</td>
<td>62.0</td>
</tr>
<tr>
<td>140 - 170</td>
<td>Soft material</td>
<td>62.0</td>
</tr>
<tr>
<td>170 - 230</td>
<td>Hard material</td>
<td>139.9</td>
</tr>
</tbody>
</table>

Bench Mark and Method Used to Determine Ground Elevation: Steel peg

10. TOTAL DEPTH OF WELL BELOW GROUND 450 ft.

11. HOLES SIZE: 8 inch dia. from 0 ft. to 50 ft. below ground

12. CASING INSTALLED:
   - In.-D. x 110' 2.64 ft. wall section 0 ft. below ground
   - In.-D. x 340' 2.64 ft. wall perforated section 110 ft. below ground

13. ANNULUS: Grouted from 103.2 ft. below ground to 0 ft. below ground

14. INITIAL WATER LEVEL 135.8 ft. below ground. Date and time of measurement 8/23/93 4:10 pm

15. INITIAL CHLORIDE 0 ppm

16. INITIAL TEMPERATURE 98°F

17. DATE OF PUMP INSTALLATION No pump installed

18. PUMP INSTALLATION:

<table>
<thead>
<tr>
<th>Motor type, H.P., Voltage, rpm</th>
<th>Capacity (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

19. PUMPING TESTS:

<table>
<thead>
<tr>
<th>Date</th>
<th>Start water level ft. below R.P.</th>
<th>End water level ft. below R.P.</th>
<th>Depth of Well ft. below R.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/23/93</td>
<td>30.7</td>
<td>30.7</td>
<td>27.4</td>
</tr>
</tbody>
</table>

Remarks: Draw down will be in pounds (PSI)

For Official Use:
Job Name: Job No: 5825-03
Longtitude: 5825-03
Latitude: 21 58 09
<table>
<thead>
<tr>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks, Dates</th>
<th>Water Level (ft.)</th>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks, Dates</th>
<th>Water Level (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>320 to 330</td>
<td>Soft material</td>
<td>138.3</td>
<td>412 to 414</td>
<td>Soft material</td>
<td>128.4</td>
</tr>
<tr>
<td>330 to 340</td>
<td>Hard material</td>
<td>138.3</td>
<td>414 to 424</td>
<td>Hard material</td>
<td>139.8</td>
</tr>
</tbody>
</table>

9. (cont'd) PUMPING TESTS (cont'd):

<table>
<thead>
<tr>
<th>Elapsed Time (hours)</th>
<th>Rate (gpm)</th>
<th>Draw-down (ft.)</th>
<th>Cl- (ppm)</th>
<th>Temp. °F</th>
<th>Elapsed Time (hours)</th>
<th>Rate (gpm)</th>
<th>Draw-down (ft.)</th>
<th>Cl- (ppm)</th>
<th>Temp. °F</th>
</tr>
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<tbody>
<tr>
<td>to</td>
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<td>to</td>
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</tr>
</tbody>
</table>

Remarks (cont'd): 2" x .02 Screen from 447.8' to 357.8'
2" Blank from 357.8' to 337.1'
2" x .02' Screen from 337.8 to 327.8
2" Blank from 327.8 to 303.8
2" x .02 Screen from 303.8' to 103.2'
2" Blank from 103.2 to Ground level - elevation 472.44

2" Blank is 2' above elevation point
All 2" PVC pipe - screen and blank
HAIKU MAUKA OBSERVATION WELL #5
STATE WELL 85825-83
AS-BUILT  SEPT 93

474.5' +/- ELEVATION

472.44' ELEVATION GROUND LEVEL

- BLANK CASING, 2"
- CEMENT FILL OF ANNULUS 135' +/-
- BENTONITE SEAL, 2 FT
- SCREEN, 2"
- 6" HOLE
- SAND BTB, FILL OF ANNULUS

WATER LEVEL
STATE WELL NO. 5825-02  WELL NAME Haiku Hauka OR 84  ISLAND Kauai

LOCATION: Address Tax Map Key

DRILLING OR PUMP INSTALLATION CONTRACTOR PR Drilling Co.

CONTRACTOR'S C-67 LICENSE NUMBER C 9627

NAME OF DRILLER WHO PERFORMED WORK William Tower

TYPE OF RIG/CONSTRUCTION TH-10 IR Drill

DATE OF WELL DRILLING COMPLETION 9/3/93

GROUND ELEVATION (m/s) 475.71 ft.

Top of Drilling Platform (m/s) 479.1 ft.

Height of Drilling Platform above ground surface 4 ft.

Bench Mark and Method Used to Determine Ground Elevation

DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Water Level (ft)</th>
<th>Rock Description, Remarks, Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 30</td>
<td>126 ft.</td>
<td>Dirt</td>
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<tr>
<td>30 to 50</td>
<td>130 ft.</td>
<td>Rock material</td>
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<tr>
<td>50 to 70</td>
<td>130 ft.</td>
<td>Soft material</td>
</tr>
<tr>
<td>70 to 110</td>
<td>170 ft.</td>
<td>Hard rock</td>
</tr>
<tr>
<td>110 to 148</td>
<td>210 ft.</td>
<td>Soft (SEAWATER EFFECT)</td>
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</tbody>
</table>

(If more space is needed, continue on back)

TOTAL DEPTH OF WELL BELOW GROUND 450 ft.

HOLE SIZE: 8 inch dia. from 0 ft. to 30 ft. below ground

CASING INSTALLED:

<table>
<thead>
<tr>
<th>2 in. I.D. x 100 ft. wall section</th>
<th>0 ft. below ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 in. I.D. x 450 ft. wall section</td>
<td>100 ft. below ground</td>
</tr>
</tbody>
</table>

(If more space is needed, continue on back)

ANNULUS:

<table>
<thead>
<tr>
<th>GROUTED from 97.0 ft. below ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUTED from 450 ft. below ground</td>
</tr>
</tbody>
</table>

INITIAL WATER LEVEL 196.5 ft. below ground. Date and time of measurement 9/2/93-3:30pm

INITIAL CHLORIDE 0 ppm Date and time of sampling

INITIAL TEMPERATURE 0°F Date and time of sampling

DATE OF PUMP INSTALLATION No pump installed

PUMP INSTALLATION:

<table>
<thead>
<tr>
<th>Pump Type, Make, Serial No.</th>
<th>Capacity (gpm)</th>
</tr>
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<tbody>
<tr>
<td>None</td>
<td>n/a</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Motor type, H.P., Voltage, rpm</th>
<th>n/a</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Depth of Pump Intake Setting</th>
<th>n/a ft. below</th>
<th>n/a, which elevation is</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Depth of bottom of airliner</th>
<th>n/a ft. below</th>
<th>n/a, which elevation is</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Pumping Head</th>
<th>n/a ft.</th>
</tr>
</thead>
</table>

PUMPING TESTS:

<table>
<thead>
<tr>
<th>Start water level</th>
<th>ft. below R.P.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>End water level</td>
<td>ft. below R.P.</td>
<td></td>
</tr>
<tr>
<td>Depth of well</td>
<td>ft. below R.P.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elapsed Time (hours)</th>
<th>Rate (gpm)</th>
<th>Temp. (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawn down (ft)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>8:25</th>
<th>9:35</th>
<th>Pump well dry</th>
</tr>
</thead>
</table>

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

Remarks:

Contractor (print) PR Drilling

Title Driller

Signature William Tower

Date 9/2/93

For Driller's Use

Job Name Job No

For Official Use

Well No. 5825-02

Longitude 159 25 24

Latitude 21 58 26
DRILLER'S LOG (cont'd):

<table>
<thead>
<tr>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks, Dates</th>
<th>Water Level (ft.)</th>
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</thead>
<tbody>
<tr>
<td>405 to 440</td>
<td>Soft material</td>
<td>to</td>
</tr>
<tr>
<td>to</td>
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<td>to</td>
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<tr>
<td>to</td>
<td></td>
<td>to</td>
</tr>
<tr>
<td>440 to 450</td>
<td>Hard material</td>
<td>to</td>
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<td>to</td>
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<td>to</td>
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</tbody>
</table>

PUMPING TESTS (cont'd):

<table>
<thead>
<tr>
<th>Elapsed Time (hours)</th>
<th>Rate (gpm)</th>
<th>Draw-down (ft.)</th>
<th>Cl- (ppm)</th>
<th>Temp. °F</th>
</tr>
</thead>
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<td>to</td>
<td>to</td>
<td>to</td>
<td>to</td>
<td>to</td>
</tr>
</tbody>
</table>

Remarks (cont'd):

2" x .02 Screen from 449.0' to 99'
2" Blank from 99' to 0' Ground elevation - 475.71
2" Blank left 2' above elevation stake

All 2" PVC pipe used.
To: Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Fr: John Stubbart

Re: Well Completion Reports  
Observation Well #5825-02  
Observation Well #5825-03

Date: 29 Sep 93

On behalf of the contractor, PR Drilling, and the owner, Grove Farm Company, Incorporated, we are forwarding the attached Well Completion Reports for the wells known as Haiku Mauka Observation Well #4 (#5825-02) and Haiku Mauka Observation Well #5 (#5825-03). Included are the as-builds for the wells.

No chemical analysis was done as the wells were only cleaned and pumped to observe the water level. They are to be used for water level observation only.

cc: Greg Kamm, Grove Farm Co.  
Robert Akinaka, Akinaka and Associates  
Richard Theis, PR Drilling
MEMORANDUM

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

FROM: Don Hubbard, Administrator
      State Historic Preservation Division

SUBJECT: Historic Preservation Review -- Application for Well Construction & Pump Installation Permit, Puhi Well No. 4 (County of Kauai, Water Dept.)
         TMK: 3-4-05: 3
         Puhi, Lihue, Kauai

Our staff archaeologist conducted a field inspection of the project area. No significant historic sites were found. Thus, the proposed project will have "no effect" on significant historic sites.

If you have any questions, please call Ms. Nancy McMahon at 587-0006.

NM: amk

c: Greg Kamm, Grove Farm Properties
To: Mr. Keith W. Ahue, Chairperson  
Commission on Water Resource Management  
State of Hawaii  
Department of Land and Natural Resources  
P. O. Box 621  
Honolulu, HI  96809  

Subject: Well Construction Permit for Haiku Mauka Observation Well 5, Well No. 5825-03, Puhi, Kauai  

Message: Enclosed, is an executed acceptance and agreement to the conditions of the above-mentioned subject by me dated July 16, 1993.  

FROM  
Greg Kamm  
Vice President
WELL CONSTRUCTION PERMIT

for

Haiku Mauka Observation Well 5
Well No. 5825-03
Puhi, Kauai

TO: Grove Farm Properties, Inc.
3-1850 Kaumualii Highway, Suite 3001
Puhi, HI 96780

In accordance with Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct Haiku Mauka Observation Well 5 (Well No. 5825-03) at TMK: 3-4-05:3, 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 by this permit commences.

2. The well shall be used to determine water levels and geologic information.

3. The following shall be submitted to the Commission within 30 days after completion of the well:
   b. As-built sectional drawing of the well.
   c. Plot plan and map showing the exact location of the well.
   d. Periodic reports of monitoring and testing results.

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 the 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.

6. Upon completion of monitoring operations, the applicant shall obtain a well construction permit to seal the well with cement grout in a manner approved by the Commission.

KEITH W. AHUE, Chairperson
Commission on Water Resource Management

Date of Issuance

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: 7/16/93

Printed Name: Greg Kamo

Firm or Title: Vice President

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

Enc. (Well Completion Report form)
cc: USGS
Department of Health
Safe Drinking Water Branch
Solid and Hazardous Waste Branch
Wastewater Branch
Ground Water Protection Program
Kauai Department of Water
Akinaka & Associates, Ltd.
Mr. Keith Ahue, Chairman  
Commission on Water Resource Management  
State of Hawaii Dept. of Land & Natural Resources  
PO Box 621  
Honolulu, HI  96809  

Attention: Ms. Rae Loui, Deputy Director  

RE: Notification of Well Construction Commencement  
Grove Farm's Haiku Mauka Observation Well #5  
State Well #5825-03  

Dear Ms. Loui:  

Pursuant to condition #1 of the Well Construction Permit issued by the Water Commission on 7/9/93, this letter is notification that work on the subject well will begin approximately 7/30/93. PR Drilling will be doing the work for us under the direction of Mr. Steve Bowles of Waimea Water Services, Inc. and Mr. Bob Akinaka of Akinaka & Associates.  

If you have questions, please call me at 1-245-3678, Mr. Steve Bowles at 1-885-5941 or Mr. Bob Akinaka at 536-7721.  

Sincerely,  

[Signature]  

Greg Kamm  
Vice President  

cc: Ray Sato  
Steve Bowles  
Bob Akinaka  
David Pratt
Mr. Keith W. Ahue, Chairperson
Commission on Water Resource Management
State of Hawaii
Department of Land and Natural Resources
P. O. Box 621
Honolulu, HI 96809

Subject: Well Construction Permit for Haiku Mauka Observation Well 4, Well No. 5825-02, Puhi, Kauai

Message: Enclosed, for your information, is an executed agreement by me dated July 2, 1993 regarding the above-mentioned subject.

FROM

Greg Kamm
Vice President
WELL CONSTRUCTION PERMIT

for

Haiku Mauka Observation Well 4
Well No. 5825-02
Puhi, Kauai

TO: Grove Farm Properties, Inc.
3-1850 Kaumualii Highway, Suite 3001
Puhi, HI 96780

In accordance with Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct Haiku Mauka Observation Well 4 (Well No. 5825-02) at TMK: 3-4-05:3, 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 by this permit commences.

2. The well shall be used to determine water levels and geologic information.

3. The following shall be submitted to the Commission within 30 days after completion of the well:
   a. Well Completion Report.
   b. As-built sectional drawing of the well.
   c. Plot plan and map showing the exact location of the well.
   d. Periodic reports of monitoring and testing results.

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 the 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.

6. Upon completion of monitoring operations, the applicant shall obtain a well construction permit to seal the well with cement grout in a manner approved by the Commission.

KEITH W. AHUE, Chairperson
Commission on Water Resource Management

JUN 30 1993
Date of Issuance

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: 7/2/93

Printed Name: Greg Kamm

Firm or Title: Grove Farm Properties, Inc.

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

Enc. (Well Completion Report form) c: USGS
   Department of Health
   Safe Drinking Water Branch
   Solid and Hazardous Waste Branch
   Wastewater Branch
   Ground Water Protection Program
   Kauai Department of Water
   Akinaka & Associates, Ltd.
Mr. Keith Ahue, Chairman
Commission on Water Resource Management
State of Hawaii Dept. of Land & Natural Resources
PO Box 621
Honolulu, HI 96809

Attention: Ms. Rae Loui, Deputy Director

RE: Notification of Well Construction Commencement
Grove Farm's Haiku Mauka Observation Well #4
State Well #5825-02

Dear Ms. Loui:

Pursuant to condition #1 of the Well Construction Permit issued by the Water Commission on 6/30/93, this letter is notification that work on the subject well will begin no later than 7/20/93. PR Drilling will be doing the work for us under the direction of Mr. Steve Bowles of Waimea Water Services, Inc. and Mr. Bob Akinaka of Akinaka & Associates.

If you have questions, please call me at 1-245-3678, Mr. Steve Bowles at 1-885-5941 or Mr. Bob Akinaka at 536-7721.

Sincerely,

[Signature]

Greg Kamm
Vice President

cc: Ray Sato
    Steve Bowles
    Bob Akinaka
    David Pratt
WELL CONSTRUCTION PERMIT

for

Haiku Mauka Observation Well 5
Well No. 5825-03
Puhi, Kauai

TO: Grove Farm Properties, Inc.
3-1850 Kaumualii Highway, Suite 3001
Puhi, HI 96780

In accordance with Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct Haiku Mauka Observation Well 5 (Well No. 5825-03) at TMK: 3-4-05-3, 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 by this permit commences.

2. The well shall be used to determine water levels and geologic information.

3. The following shall be submitted to the Commission within 30 days after completion of the well:
   b. As-built sectional drawing of the well.
   c. Plot plan and map showing the exact location of the well.
   d. Periodic reports of monitoring and testing results.

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 the 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.

6. Upon completion of monitoring operations, the applicant shall obtain a well construction permit to seal the well with cement grout in a manner approved by the Commission.

KEITH W. AHUE, Chairperson
Commission on Water Resource Management

JUL 9 1993
Date of Issuance

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.

Enc. (Well Completion Report form)
cc: USGS
Department of Health
Safe Drinking Water Branch
Solid and Hazardous Waste Branch
Wastewater Branch
Ground Water Protection Program
Kauai Department of Water
Akinaka & Associates, Ltd.
<table>
<thead>
<tr>
<th>INVOICE DATE</th>
<th>INVOICE NUMBER</th>
<th>DESCRIPTION</th>
<th>AMOUNT</th>
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<td>25.00</td>
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<td>25.00</td>
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<td>TO:</td>
<td>INIT:</td>
<td>PLEASE:</td>
<td>REMARKS:</td>
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Please make a new file for this - Thanks Ed.
WELL CONSTRUCTION PERMIT

for

Haiku Mauka Observation Well 4
Well No. 5825-02
Puhi, Kauai

TO: Grove Farm Properties, Inc.
3-1850 Kaumualii Highway, Suite 3001
Puhi, HI 96780

In accordance with Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct Haiku Mauka Observation Well 4 (Well No. 5825-02) at TMK: 3-4-05:3, 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 by this permit commences.

2. The well shall be used to determine water levels and geologic information.

3. The following shall be submitted to the Commission within 30 days after completion of the well:
   a. Well Completion Report.
   b. As-built sectional drawing of the well.
   c. Plot plan and map showing the exact location of the well.
   d. Periodic reports of monitoring and testing results.

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 the 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.

6. Upon completion of monitoring operations, the applicant shall obtain a well construction permit to seal the well with cement grout in a manner approved by the Commission.

KEITH W. AHUE, Chairperson
Commission on Water Resource Management

JUN 30 1993
Date of Issuance

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.

Enc. (Well Completion Report form)
c: USGS
   Department of Health
   Safe Drinking Water Branch
   Solid and Hazardous Waste Branch
   Wastewater Branch
   Ground Water Protection Program
Kauai Department of Water
Akinaka & Associates, Ltd.
June 4, 1993

Mr. Keith W. Ahue, Chairman
Commission on Water Resource Management
Dept. of Land & Natural Resources
State of Hawaii
PO Box 373
Honolulu, HI 96809

Attention: Ms. Rae Loui, Deputy Director

RE: Application For Well Construction Permit
Observation Well #4 for Grove Farm's Haiku Mauka Well #1
(aka State Well #5825-01)
Haiku Mauka, Puhi, Kauai, Hawaii
TMK: (4) 3-4-5:3 (por.)

Dear Ms. Loui:

We enclose for your review and approval the original and 2 copies of the above-referenced permit application, as well as our check #9689 for $25.00 filing fee.

If you have questions, please call me at 1-245-3678 or Mr. Robert Y. Akinaka at 536-7721. Thank you for your consideration.

Sincerely,

[Signature]

Greg Kamm
Vice President

cc: Robert Y. Akinaka (Akinaka & Associates, Ltd.)
APPLICATION FOR PERMIT

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

APPLICATION FOR PERMIT
[ ] Well Construction  [ ] Pump Installation

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 821, Honolulu, Hawaii 96823. Application must be accompanied by a nonrefundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-2255.

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
      Firm/Name: GROVE FARM PROPERTIES, INC.
      Contact Person: GREG KAMM
      Address: 3-1650 KAUHUALI HWY., STE. 3001
               PUKI, KAUAI, HAWAII (LAI)

   (b) LANDOWNER
      Firm/Name: GROVE FARM PROPERTIES, INC.
      Contact Person: GREG KAMM
      Address: 3-1650 KAUHUALI HWY., STE. 3001
               PUKI, KAUAI, HAWAII

   (c) CONTRACTOR
      Firm/Name: PR DRILLING CO., INC.
      Contact Person: Contractor’s G-7 License No.
      Address: 235 KELLOG STREET, WAHINAU, HAWAII
               96786

2. WELL LOCATION/NAME: HAIKU MUKUA WELL NO. 1 - OBSERVATION
   Island: KAUAI
   Address: PUKI, KAUAI
   Tax Map Key: 3-4-05:3
   (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
   [ ] Modify Existing Well
   [ ] Redrill
   [ ] Install New Pump
   [ ] Replace Pump
   [ ] Deepen
   [ ] Abandon/Seal
   [ ] * 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: N/A gallons per minute
   Motor: Diesel
   Gas
   Electric, rated horsepower of
   Type:
   [ ] Deep Well Turbine
   [ ] Rotary
   [ ] Rotary-Displacement
   [ ] Rotory-Gear
   [ ] Propeller
   [ ] Reciprocating
   [ ] Impulse

5. PROPOSED USE:
   Municipal (including hotels, stores, etc.) [ ]
   Domestic (individual, noncommercial water sys.) [ ]
   Irrigation (crop) [ ]
   Other (explain) [ ]
   Observation
   County Zoning (describe):
   Land Use District: [ ] Urban [ ] Agriculture AGRICULTURE
   [ ] Rural [ ] Conservation
   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: N/A gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
       [ ] Flow-meter
       [ ] Open-pipe
       [ ] Orifice Plate
       [ ] Weir

7. PENDING ACTIONS:
   [ ] CDUA
   [ ] SMA
   [ ] EIS
   [ ] EA
   [ ] NONE
   [ ] Other (explain)

8. REMARKS, EXPLANATIONS:
   THIS WELL IS INTENDED TO DETERMINE WATER LEVELS AND
   GEOLOGIC INFORMATION IN SUPPORT OF GROVE FARM PROPERTIES, INC., HAIKU MUKUA WELL NO. 1
   (STATE WELL NO. 5825-01)
   (If more space is needed, continue on back)

   [ ] Well Owner
   [ ] Landowner
   [ ] Contractor

   Signature: GREG KAMM
   Signature: GREG KAMM
   Signature: GREG KAMM

   Date: 6/4/93
   Date: 6/4/93
   Date: 6/4/93

   For Official Use Only:
   Date Received
   Date Accepted
   Field Checked By
   Date

   Aquifer System Name: 5825-02
   State Well No.: 5825-02
9. PROPOSED WELL SECTION

*SEE ATTACHED EXHIBIT "A"

Elevation at top of casing ______ ft., msl.

Cement Grout: ______ ft.

Rock Packing ______ ft.

Hole Diameter: ______ in.

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.

Total Depth ______ ft.

Open Hole:
- Length ______ ft.
- Diameter ______ 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.
APPLICATION FOR PERMIT

Well Construction or □ Pump Installation

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 808-587-0223.

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
   Firm/Name: GROVE FARM PROPERTIES, INC.
   Contact Person: GREG KAMM
   Address: 3-1850 KAUMUALI HWY., STE. 3001
   PO Box. KAUAI, HAWAII

   (b) LANDOWNER
   Firm/Name: GROVE FARM PROPERTIES, INC.
   Contact Person: GREG KAMM
   Address: 3-1850 KAUMUALI HWY., STE. 3001
   PO Box. KAUAI, HAWAII

   (c) CONTRACTOR
   Firm/Name: PR DRILLING CO. INC
   Address: 235 KELLOG STREET, WAHIAWA, HAWAII 96786

2. WELL LOCATION/NAME: HAIKU MAUKA WELL NO. 1 - OBSERVATION
   Island: KAUAI
   Address: PO BOX KAUAI, HAWAII
   Tax Map Key: 3-4-05:3

   (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
   □ Modify Existing Well
   □ Replace Pump
   □ Deepen
   □ * Abandon/Seal
   □ * 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: N/A gallons per minute

   Pump Type:
   □ Deep Well Turbine
   □ Submersible
   □ Centrifugal
   □ Rotary
   □ Rotary-Displacement
   □ Rotary-Gear
   □ Propeller
   □ Reciprocating
   □ Impulse
   □ Motor:
   □ Diesel
   □ Gas
   □ Electric, rated horsepower of

5. PROPOSED USE:
   □ Municipal (including hotels, stores, etc.)
   □ Domestic (individual, noncommercial water use)
   □ Irrigation (crop)
   □ Other (explain) OBSERVATION
   State Land Use District: □ Urban □ Agriculture □ Rural □ Conservation
   County Zoning (describe): □ AGRICULTURE
   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL:
   □ Flow-meter
   □ Open-pipe
   □ Orifice Plate
   □ War
   □ N/A gallons per day

7. PENDING ACTIONS:
   □ CDQA
   □ SMA
   □ EIS
   □ EA
   □ NONE
   □ Other (explain)

8. REMARKS, EXPLANATIONS:

   THIS WELL IS INTENDED TO DETERMINE WATER LEVELS AND
   GEOLOGIC INFORMATION IN SUPPORT OF GROVE FARM PROPERTIES, INC. HAIKU MAUKA WELL NO. 1
   (STATE WELL NO. 5825-01)

   (If more space is needed, continue on back)

   Signature: GREG KAMM
   Date: 6/19/93
   Well Owner

   Signature: GREG KAMM
   Date: 6/19/93
   Landowner

   Signature: GREG KAMM
   Date: _
   Contractor

   For Official Use Only:
   Date Received: 
   Date Accepted: 
   Field Checked By: 
   Date: 
   Longitude: 
   Latitude: 
   Aquifer System Name: 
   State Well No. 5825-01
9. PROPOSED WELL SECTION

*SEE ATTACHED EXHIBIT "A"

Elevation at top of casing: _____ ft., msl.

Ground Elevation: _____ ft., msl*

Cement Grout: _____ ft.

Solid Casing:
Material: ____________________
Length: ____________________ ft.
Diameter: ____________________ in.
Wall thickness: ____________________ in.

Rock Packing: _____ ft.

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

Hole Diameter: _____ in.

Total Depth: _____ ft.

Open Hole:
Length: ____________________ ft.
Diameter: ____________________ in.

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

APPLICATION FOR PERMIT
☒ Well Construction  ☐ Pump Installation

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1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
      Firm/Name: GROVE FARM PROPERTIES, INC.  
      Contact Person: GREG KAMM  
      Address: 3-1850 KAUMUALI HWY., STE. 3001  
      PUHI, KAUA'I, HAWAII

   (b) LANDOWNER
      Firm/Name: GROVE FARM PROPERTIES, INC.  
      Contact Person: GREG KAMM  
      Address: 3-1850 KAUMUALI HWY., STE. 3001  
      PUHI, KAUA'I, HAWAII

   (c) CONTRACTOR
      Firm/Name: PR DRILLING CO., INC.  
      Contact Person:  
      Address: 235 KELLOG STREET, WAILUA, HAWAII 96786

2. WELL LOCATION/NAME: HAIKU MAUKA WELL NO. 1 - OBSERVATION  
   Island: KAUA'I  
   Tax Map Key: 3-4-05:3

   (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  ☐ Alter Location  
   ☐ Modify Existing Well  ☒ Redrill  
   ☐ Install New Pump  ☐ Replace Pump  ☐ Modify Pump
   * Be sure to complete and submit well abandonment report upon completion of work.

   (b) WELL TYPE:  
      ☐ Dug  ☐ Bored  ☐ Driven  ☐ Perforated  ☐ 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: N/A gallons per minute
   Pump Type:  
      ☐ Deep Well Turbine  ☐ Rotary  
      ☐ Submersible  ☐ Rotary-Displacement  
      ☐ Centrifugal  ☐ Rotary-Gear  
      ☐ Centrifugal  ☐ Gas
   Motor:  
      ☐ Diesel  ☐ Gas  
      ☐ Electric, rated horsepower of

5. PROPOSED USE:  
   ☐ Municipal (including hotels, stores, etc.)  ☐ Military  
   ☐ Domestic (individual, noncommercial water use)  ☐ Industrial  
   ☐ Irrigation (crop) ☐ Other (explain) OBSERVATION
   State Land Use District:  
      ☐ Urban  ☐ Agriculture  ☐ Rural  ☐ Conservation
   County Zoning (describe):  
   AGRICULTURE
   (If more space is needed, continue below under remarks, explanations.)

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

7. PENDING ACTIONS:  
   ☐ COUA  ☐ SMA  ☐ EIS  ☐ EA ☐ NONE  ☐ Other (explain)

8. REMARKS, EXPLANATIONS:  
   THIS WELL IS INTENDED TO DETERMINE WATER LEVELS AND  
   GEOLOGIC INFORMATION IN SUPPORT OF GROVE FARM PROPERTIES, INC., HAIKU MAUKA WELL NO. 1  
   (STATE WELL NO. 5825-01)
   (If more space is needed, continue on back)

   Signature:  
   Date: 6/19/93

   Signature:  
   Date: 6/19/93

   Signature:  
   Date:  

   For Official Use Only:
   Date Received
   Date Accepted
   Field Checked By
   Date
   Longitude
   Latitude
   Aquifer System Name
   State Well No.
   5/24/92
9. PROPOSED WELL SECTION

*SEE ATTACHED EXHIBIT "A"

- Elevation at top of casing: ___________ ft., ml.
- Ground Elevation: ___________ ft., ml.
- Cement Grout: ___________ ft.
- Rock Packing: ___________ ft.
- Solid Casing:
  - Material:
  - Length: ___________ ft.
  - Diameter: ___________ in.
  - Wall thickness: ___________ in.
- Hole Diameter: ___________ in.
- Total Depth: ___________ ft.
- Casing:
  - □ Perforated
  - □ Screen
  - Material:
  - Length: ___________ ft.
  - Diameter: ___________ in.
  - Wall thickness: ___________ in.
  - Openings: ___________ sq. in./L.F.
- Open Hole:
  - Length: ___________ ft.
  - Diameter: ___________ in.

*Approximate elevation at time of filing application. Ground elevation above mean sea level (ml) 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.