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Mr. Todd Brown  
Kamaole Sands AOAO  
2695 South Kihei Road  
Kihei, HI 96753  

Dear Mr. Brown:  

Well Completion Report for Kamaole Sands AOAO Irrigation Well (Well No. 4226-17)  

We received your Well Completion Report Part II for the Kamaole Sands AOAO Irrigation Well (Well No. 4226-17) on September 4, 2002 and after correcting the well location identified on the application, acknowledge that it is complete as of January 28, 2003. This completes the permitting requirements for this well.  

Please note that the original estimate of well location was erroneous by a distance of about one mile, and that the correct location results in a change of well number from 4326-10 to 4226-17. Please use this number in future communications about this well.  

If you have any questions, please contact Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.  

Sincerely,  

DEAN A. NAKANO  
Acting Deputy Director  

Cl: ss  

cc: Wailani Drilling, Inc.
Return Receipt Fax Memo

To: Charley Lee

From: Ann Robertson

Re: Items from latest loose ends list

Pages: 9 pages including this cover sheet

✓ Resubmitting signed PIP & WCR Part II for Kamaole Sands Irrigation Well No. 4326-10
✓ Plot Plan for Kamaole Sands Irrigation Well No. 4326-10
✓ Plot Plan for Haiku-Robertson #2 Well No. 5615-06
✓ Plot Plan for Kaeleku-Smith Well No. 4702-01 can't identify location on map
✓ Plot Plan for Ho'olawa-Kahui Pono Well No. 5514-06
✓ Plot Plan for Ha'iku Summit Trade 1 & 2 Well No. 5617-01 & 5517-03

Please check off the above items as received and return the fax to 808/572-0925.
Thank You................

Sincerely,
Ann Robertson
Kamaole Sands

#4326-10 Location of Well

Aloha!
PUMP INSTALLATION PERMIT

Kamaole Sands Irrigation Well, Well No. 4326-10

Date: Jan 14 03 05:20p

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

According to 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 Kamaole Sands Irrigation Well (Well No. 4326-10) at 2990 South Kehel Road, Maui, TMK 3-9-4-4, 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 180 gpm rated capacity at 60 psi ft. of head, or loss, 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 an annual basis, on forms provided by the Chairperson (attached).

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

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

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

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

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

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

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

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

Date of Approval: August 21, 2002
Expiration Date: August 21, 2004

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: [Signature]
Date: 9/11/02
Printed Name: TODD A BROWN Firm or Title: KAMAOLE SANDS, RESIDENT MANAGER

Installer's Signature: [Signature]
Date: 9/11/02
Printed Name: MIKE ROBERTSON C-57, C-57a, or A License #: 20115 Firm or Title: WAILANI DRILLING

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

Attachments:
- USGS Department of Health Safe Drinking Water & Wastewater Branch
- Maui Department of Water Supply
- Wailani Drilling, Inc.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-587-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwrml

---

1. State Well No.: 4326-10
   Well Name: Kamaole Sands AOAO Irrigation
   Island: Maui

2. Address: 2695 South Kihei Road
   Tax Map Key: 3-9-4-4

3. Pump Installation Company: Wailani Drilling

4. Date Pump Installed: 8/16/02
   (month/day/year)

5. PERMANENT PUMP INFORMATION (Attach pump specifications and rating curve)
   Pump Type, Make, Serial No.: Submersible, Grundfos, 150-5150-7
   Rated Capacity: 150 gpm at head of: 260 ft
   Motor Type, H.P., Voltage, rpm: Franklin, 15 H.P., 230 V, 3 PH, 3456 RPM
   Type of flow meter: Micrometer (Turbine) which measures in G.P.M.
   Model Number: M-3
   Serial Number: NA

   Pump type (check one):
   - Deep Well Turbine
   - Submersible
   - Centrifugal
   - Rotary
   - Rotary-Displacement
   - Reciprocating
   - Rotary-Gear
   - Propeller
   - Impulse

   Method of flow measurement:
   - Flowmeter
   - Manufacturer: Micrometer
   - Make: Turbine
   - Size: 3"

   - Weir
   - Open Pipe
   - Orifice
   - Other*, explain below

   *attach schematic

6. Method of flow measurement:

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

8. Attach photograph of well and concrete pad clearly showing benchmark on concrete pad.

9. Other remarks/comments:
   **TEST PUMP WAS USED AS PERMANENT PUMP PER VARIANCE APPROVAL, WELL WAS COMPLETED 4/25/02, WITH THE DISCUSSION & PROGRAMING OF U.F.D. CONTROLLER ON 9/20/02.**

---

Pump Installation Contractor (print) Mike Robarts
C-57/C-57a/L Lic. No. 20115

Signature: __________________________________________________________________________
Date: __________

Permittee (print) John A. Brown

Signature: __________________________________________________________________________
Date: __________
9. AS-BUILT PUMP SECTION
(Please attach as-built if different from diagram provided below)

Bench mark elevation
surveyed to nearest 0.01 ft. =
\( \pm 0.01 \) ft. mean sea level

Elevation of top of chase tube
\( \pm 1.92 \) ft. mean sea level

Pump intake depth = \( \pm 5.5 \) ft.
(referenced to bench mark)

Chase tube depth = \( \pm 3.5 \) ft.
(referenced to bench mark)

If airline installed,
bottom of airline elevation =
\( \pm 14 \) ft. mean sea level

Enclosure

c: Wailani Drilling, Inc.

GILBERT S. COLOMA-AGARAN
Chairperson
PUMP INSTALLATION PERMIT
Kamaole Sands Irrigation Well, Well No. 43-10

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Kamaole Sands Irrigation Well (Well No. 43-10) at 2695 South Kihei Road, Maui, TMK 3-9-4:4, 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 180 gpm rated capacity at 60 psi ft. of head, 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 an annual basis, on forms provided by the Chairperson (attached).

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

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

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

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

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

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

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

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

Date of Approval: August 21, 2002
Expiration Date: August 21, 2004

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:
- USGS Department of Health' Safe Drinking Water & Wastewater Branch
- Maui Department of Water Supply
- Wailani Drilling, Inc.
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR PERMIT ISSUANCE

FROM: CHARLEY
DATE: 07 Sep '02
SUSPENSE DATE: ____________

TO: BAUER, G.
INIT: ---
TO: CHING, F.
INIT: ---
TO: DANBAIRA, S.
INIT: ---
TO: FUJII, N.
INIT: ---
TO: GOODING, K.
INIT: ---
TO: HARDY, R.
INIT: ---
TO: HIGA, D.
INIT: ---
TO: HIRANO, E.
INIT: ---
TO: ICE, C.
INIT: ---
TO: IMATA, R.
INIT: ---
TO: JINNAI, R.
INIT: ---
TO: KUMMURA, I.
INIT: ---
TO: NAKAMA, L.
INIT: ---
TO: NAKANO, D.
INIT: ---
TO: NISHIOKA, L.
INIT: ---
TO: OHYE, M.
INIT: ---
TO: SAKODA, E.
INIT: ---
TO: SUBIA, S.
INIT: ---
TO: SWANSON, S.
INIT: ---
TO: UYENO, D.
INIT: ---
TO: YODA, K.
INIT: ---

PLEASE:
1 Approval
2 Signature
3 Information
4 Approval
5 Review & Comment
6 Take Action
7 Type Draft
8 Type Final
9 File
10 Xerox --- copies

WELL NUMBER 432610
WELL NAME Kamehameha (m3)

☐ WELL CONSTRUCTION

ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 SDWB
4 WWB
5 CWB
6 HEER
7 LD
8 HP
9 PUMP TEST
10 WCR I FORM

TO BE SENT TO APPLICANT
FOR OFFICE USE ONLY

☒ PUMP INSTALLATION

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 SDWB
4 WWB
5 CWB
6 HEER
7 LD
8 HP
9 WCR II FORM
10 WUR FORM

TO BE SENT TO APPLICANT
FOR OFFICE USE ONLY

WCR1 in your IN tray (Outgoing mail), w/ corrected survey
ATTN. Charlie Ice

Fax Number 1-808-587-0219
Phone Number 808-587-0251

FROM Pacific Rim Productions
Fax Number 808-877-7845
Phone Number 808-877-7023

SUBJECT Kamaole Sands Pump Test Data
Number of Pages 10
Date 8/20/02

MESSAGE
Here is data but please note survey is not correct or our tape measurement is not accurate will send correction ASAP

Any ???? please call me @ 870-7626

Aloha, Bill
Kamaole Sands Data Sheet

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ATTN: CHARLIE ICE
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**Table 1 (SPLT Drawdown Test)**

- **Pumped Well No. 4326-10**
- **Observation well no.**
- **Pumped Well Name: Kamaole Sands AOAO Irr**
- **Target Q: 180 gpm**
- **Distance between Obs. & Pumped Well: 1 ft.**
- **Reference pt. for depth to water: 2 ft.**
- **Static Water Level @ start of test: 2.20 ft.**
- **Water level measurements by: □ steel tape □ pressure transducer □ airline**

**START TEST Date: 8/17/02**

**Time of day: 8:00 AM**

**Flow Meter Reading Start: 0**

**Survey Attached Not Conducted**

**Gauge:**

- **Column 1:** Gauge reading
- **Column 2:** Time difference
- **Column 3:** Pumping rate
- **Column 4:** Static level
- **Column 5:** Flow rate
- **Column 6:** Temperature
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<th>Actual Builped Time</th>
<th>Drawdown G</th>
<th>Pumping Rate Q</th>
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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:

1 starting pumping rate Q
2 minimum length of step period of constant pumping rate
3 minimum mandatory Chloride (Cl⁻) measurement/sampling at end of every step
4 Use same ending drawdown figure as start for recovery
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<th>Suggested elapsed time</th>
<th>Actual elapsed time</th>
<th>Depth to Water (nearest 0.00')</th>
<th>Recovery (percent to nearest 0.00')</th>
<th>Pumping rate (gpm)</th>
<th>EC (mil)</th>
<th>DI (ppm)</th>
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END TEST Date: 8/17/02 Time of day: 9:30 AM

ADDITIONAL REMARKS:

Person in charge of pump test (print): Mike Robertson

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 pump test.
**CONSTANT-RATE PUMP TEST DATA**

Pumped Wall No. 4326-10  Observation well no.  
Pumped Wall Name Kamaole Sands AOAO  
Target Q 180 gpm  
Distance between Obs. & Pumped Well NA ft  
Reference pt. for depth to water 47.71 ft. msl  
Static Water Level @ start of test 2.20 ft. msl  

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

START TEST  Date: 8/13/02  Time of day: 8:00 AM

<table>
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<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (Am)</th>
<th>Depth to water (ft)</th>
<th>Drawdown (ft)</th>
<th>Pumping rate (gpm)</th>
<th>Temp &amp; Ref. pt. for depth to water</th>
<th>Static Water Level at start of test</th>
<th>Static Water Level at end of test</th>
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1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery

*Flow meter reading at end of pumped period: 8134.713 gals*

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

*Begin recovery data next page*
CONFIRMATION LETTER

P.O. Box 129, Kihei, HI 96753, (808) 874-0046, Fax (808) 874-1136, info@coral.net

August 20, 2002

Mr. Todd Brown
Kamaole Sands
2695 South Kihei Road
Kihei, Maui, Hawaii 96753
FAX: 879-3272

RE: Field and office survey services to determine MSL for
the wellhead at Kamaole Sand condominium, per your
request.
Situated at Kihei, Maui, Hawaii
TMK: 3-9-04:004

Dear Mr. Brown:

Please be informed that the subject elevation was determined by actual field survey performed in
accordance with acceptable professional standards under my direct supervision on April 24, 2002.

The results of this field work determined the elevation of the "PK" nail set on the wellhead to be 49.47'
MSL.

Thank you for the opportunity to work with you on this project.

Very truly yours,

Randall Sherman
Registered Professional Land Surveyor
State of Hawaii Certificate LS 4187

29 Aug 02 telecom Bill Steele: survey redone, corrected to 52.92'. Sound tube adds 0.81 for total (53.73) depth to water.

Attention Charlie: This survey is not
correct on the sound tube tape measurement
is off it will check and make corrections.
Performance Curves 150 GPM Model 150S

FLOW RANGE: 30 - 220 GPM
OUTLET SIZE: 3" NPT
NOMINAL DIA. 6"

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
4" MOTOR STANDARD, 2-10 HP/3450 RPM
6" MOTOR STANDARD, 7.5-60 HP/3450 RPM.
8" MOTOR STANDARD, 75 HP/3580 RPM.
* Alternate motor sizes available.

Performance conforms to ISO 9906 Annex A
@ 5 ft. min. submergence.
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<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth of water (ft)</th>
<th>Recovery rate (gph)</th>
<th>Total water production (gph)</th>
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END TEST  Date: 6/19/02  Time of day: 9:00 AM

ADDITIONAL REMARKS:

Person in charge of pump test (print):  

Signature:  

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
Notice of Commission Action
Kamaole Sands AOAO Irrigation Well (Well No. 4326-10)

This letter serves as your official notice of action taken by the Commission on Water Resource Management (Commission) on the subject application. By a unanimous vote of the Commission at their meeting on July 24, 2002, the Commission:

Approved the installation of the permanent pump for pump testing in Kamaole Sands AOAO Irrigation Well (4326-10), subject to the standard conditions, and the following conditions:

1. The permittee shall notify staff one week in advance of the pump test dates.
2. The pump tests shall be started within one week of the installation of the pumps. Otherwise, the pumps shall be removed.
3. The step-drawdown test shall be performed first and the well allowed to rest for 1 day or until full water level recovery occurs before starting the long-term test.
4. The applicant shall submit pump test results within one day of the completion of each individual pump test on forms provided by the Commission.
5. Staff will complete its analysis of pump results within one business day and issue a pump installation permit if pump tests for the particular well are satisfactory.
6. In the event that a well's pump tests are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with a, b, and c above until they are in compliance with standard pump test requirements.

If you have any questions, please contact Charley Ice of the Commission Staff at 587-0251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

###

C:\docs\M\KamaoleSandsAOAO\CWRMApprov.doc
Charley,

Please ask Bill or Mike the following question: *Why is the reference point used to measure water level exactly the same as the depth to water?* That would give a water level of 0.00 ft., msl.

Glenn

Thanks - new info: see tab

requires immediate action

I already analyzed the data: pump test ok
13. AS-BUILT SECTION (Please attach as-built if different from diagram provided below)

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- Stainless Steel: (check one):
  - ASTM A409 (production wells)
  - ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3296

**Open Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
  - And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one):
  - ASTM A409 (production wells)
  - ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
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  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3296

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**HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS**

Please refer to the standards to ensure that your as-built is in compliance with applicable standards.

**Solid Casing:** ( ≥ 90% x (Ground Elev.-Water Level Elev))
- Length: 51 ft.
- Nominal Diameter: 6 in.
- Wall Thickness: 2.50 in.
- Bottom Elevation: 2.92 ft., msl

**Open Casing:**
- Perforated
- Screen
- Length: 8 ft.
- Nominal Diameter: 6 in.
- Wall Thickness: 2.50 in.
- Bottom Elevation: -6 ft., msl

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**L - A926 - 10 KAMAOLE SANDS**
## CONSTANT-RATE PUMP TEST DATA

**Table 2 (CRPTD Form 12/17/87)**

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

4" MOTOR STANDARD, 2-10 HP/3450 RPM
6" MOTOR STANDARD, 7.5-60 HP/3450 RPM.
8" MOTOR STANDARD, 75 HP/3525 RPM.
*A Alternate motor sizes available.

Performance conforms to ISO 9906 Annex A
@ 5 ft. min. submergence.
Wailani Drilling Company
Lic. # C20115

655 Kulike Road
Haiku, Maui, Hawaii 96708
Ph. 808-572-2673 Fax 572-0925
Cellular 264-7076

Kamaole Sands #4326-10
Elevation 52.92 ft, m.s.l. @
Bench Mark (Slab)

Bench Mark 52.92 Ft. Top of Slab
Measures 3ft x 3ft x 12 in

depth-ft.

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Total Well Depth 59 ft.
initial chlorides 500 ppm

Pump tested at 180 gpm for 24 hours with maximum drawdown of 1.34 ft.

*Note: not drawn to scale
Mr. Todd Brown  
Kamaole Sands AOAO  
2695 South Kihei Road  
Kihei, HI 96753  

Dear Mr. Brown:  

Notice of Commission Action  
Kamaole Sands AOAO Irrigation Well (Well No. 4326-10)  

This letter serves as your official notice of action taken by the Commission on Water Resource Management (Commission) on the subject application. By unanimous vote of the Commission at their meeting on July 24, 2002, the Commission:  

Approved the installation of the permanent pump for pump testing in Kamaole Sands AOAO Irrigation Well (4326-10), subject to the standard conditions, and the following conditions:  

1. The permittee shall notify staff one week in advance of the pump test dates.  
2. The pump tests shall be started within one week of the installation of the pumps. Otherwise, the pumps shall be removed.  
3. The step-drawdown test shall be performed first and the well allowed to rest for 1 day or until full water level recovery occurs before starting the long-term test.  
4. The applicant shall submit pump test results within one day of the completion of each individual pump test on forms provided by the Commission.  
5. Staff will complete its analysis of pump results within one business day and issue a pump installation permit if pump tests for the particular well are satisfactory.  
6. In the event that a wells pump tests are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with a, b, and c above until they are in compliance with standard pump test requirements.  

If you have any questions, please contact Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.  

Sincerely,  

[Signature]  
LINNEL T. NISHIOKA  
Deputy Director
STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

July 24, 2002
Honolulu, Oahu

APPLICANTS/ LANDOWNERS:
Kamaole Sands AOAO
Irrigation Well (4326-10)
The Fairmont Kea Lani
Irrigation Well (4026-13)
Makena Surf AOAO
Irrigation Well (3926-11)
Maui County Parks Department
Lahaina Park Well (5240-07)

DESCRIPTION:
Location: (See Exhibit)
Dimensions:
Kamaole Sands
Kea Lani (4026-13)
Makena Surf (3926-11)
Lahaina Park Well

BACKGROUND:
April 15, 1998
July 5, 2001

BACKGROUND:
April 15, 1998
July 5, 2001

VARIANCE AND DECLARATORY RULING ALLOWING USE OF PERMANENT PUMPS FOR AQUIFER TESTING

Kamaole Sands AOAO
Irrigation Well (4326-10)
The Fairmont Kea Lani
Irrigation Well (4026-13)
Makena Surf AOAO
Irrigation Well (3926-11)
Maui County Parks Department
Lahaina Park Well (5240-07)

APPLICANTS/ LANDOWNERS:
Kamaole Sands AOAO
2695 South Kihei Road
Kihei, Maui
The Fairmont Kea Lani
4100 Wailea Alanui Drive
Kihei, Maui
Makena Surf AOAO
96 Makena Alanui Drive
Kihei, Maui
Maui County Parks Department
1580 C Ka'ahumanu Avenue
Wailuku, Maui

DESCRIPTION:
Location: (See Exhibit)
Dimensions:
Kamaole Sands
Kea Lani (4026-13)
Makena Surf (3926-11)
Lahaina Park Well

BACKGROUND:
April 15, 1998
July 5, 2001
August 27, 2001 Well Construction Permit approved for Lahaina Park Well (Well No. 5240-07).
October 9, 2001 Application submitted to Commission for Makena Surf Well (Well No. 3926-11).
November 5, 2001 Well Construction Permit approved for Kea Lani Well (Well No. 4026-13).
December 4, 2001 Well Construction Permit approved for Makena Surf Well (Well No. 3926-11).
January 30, 2002 The Commission approved a variance allowing the installation of permanent pumps for well testing in the PIA-Kona Limited Partnership Wells (Well Nos. 4757-03 & 04), for 550-gpm pumps. A special testing protocol was to be followed in this variance approval (Exhibit 3).
February 27, 2002 The Commission found Wailani Drilling and the Kihei Akahi Condominium Association in violation of the Water Code for installing permanent pumps (150 gpm capacity) to test pump a well without a variance to do so. The Commission fined both the driller and applicant $750 each and also approved an after-the-fact pump installation permit for the Kihei Akahi Well (Well No. 4327-07).
March 2, 2002 Application submitted to Commission for Kamaole Sands Well (Well No. 4326-10).
March 27, 2002 Fines for the permanent pump violation in Well No. 4327-07 paid in full for both applicant and driller.
April 1, 2002 Well Construction Permit approved for Kamaole Sands Well (Well No. 4326-10) since previous fines paid.
May 23, 2002 Wailani Drilling, Inc. confirmed the request for a variance from the Water Code for each of the four captioned wells to permit installation of a permanent pump for well and aquifer testing.

ISSUES/ANALYSIS:
HAR §13-168-12(a) states:

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

Well Construction Permits (Exhibit 4) bear three standard provisions affecting installation of pumps:

1) The opening paragraph caption reads: "...this document permits the construction and testing..." (emphasis added)

2) Standard Condition #2 reads: ". No permanent pump may be installed until a pump installation permit is approved and issued by the Commission."

3) Standard Condition #7 reads: "The following shall be submitted to the Chairperson within sixty (60) days after completion of work: ...e. Complete pumping test records, ..." (emphasis added)

The main issues for this variance request deal with pump tests, the hydrologic data generated from these tests, and the cost and (in)convenience of doing such tests for the permittee.

Section 2.9 (b) of the Hawaii Well Construction and Pump Installation Standards (HWCPIS) specifies that a step-drawdown test is required for any proposed pump pumping greater than 70 gpm. The step-drawdown test
Staff Submittal

July 24, 2002

is required to establish the efficiency of the well and to provide preliminary information on the yield, drawdown and salinity of the well. Therefore, all these wells require a step-drawdown test. The specific requirements pertaining to the constant rate test can be found in Section 2.9 (b), which is attached as Exhibit 5.

Section 2.9 (c) of the HWCPIS specifies that for these wells, a constant rate pump test at least 24 hours is required. Constant rate pump tests are required to determine hydraulic properties of the aquifer, to identify nearby boundaries such as dikes in wells located in confined and semi-confined aquifers, or to determine any trend in salinity in wells located in aquifers affected by salt water intrusion. The specific requirements pertaining to the constant rate test can be found in Section 2.9 (c), which is attached as Exhibit 5.

Historically, these pump tests have been performed with temporary line-shaft test pumps capable of a wide range of pumping rates. The data from such tests were then used to size and design the final permanent pump. As a policy to enforce compliance, staff requires that pump tests are acceptably performed before the issuance of the pump installation permit for the permanent pump.

Due to the relatively small size of individual homeowner 70 gpm pumps, Section 2.9 (b) of the Hawaii Well Construction and Pump Installation Standards (HWCPIS) specified that a step-drawdown test is only required for any proposed pump pumping greater than 70 gpm. Further, for pumps less than 50 gpm a long-term aquifer test is not required either. Given that the data collected from these relatively small wells are of limited value, the Commission approved DEC-ADM 98-G5 for these wells in non-water management areas where the use is for private individual needs.

The first issue is that DEC-ADM 98-G5 does not apply to the subject permits, but the driller is asking for a variance to install the permanent submersible pump to do the pump testing and prior to the issuance of a PIP. All these wells are private but are for more than individual homeowner needs envisioned under DEC-ADM 98-G5. Also, the size of these well require both a step-drawdown test and long-term test of at least 24 hours. Therefore, these wells are to pump significant quantities of water for rather large uses and accurate data must be collected from these proposed sources.

The second issue is the same as raised in the original DEC-ADM 98-G5 and similar to the PIA-Kona Limited Partnership Wells (Well Nos. 4757-03 & 04), for 550-gpm pumps; namely balancing economic savings to the permittee vs. the accurate data collection needs of staff and the public. The Commission resolved this balance by requiring a stricter timeline on both the driller and staff in gathering, reporting, and analyzing the data from pump tests.

A third issue raised by the driller is one of safety. Installing then uninstalling temporary pumps then installing a permanent pump obviously raises the potential for accidents. Staff acknowledges this potential but does not see this as a new or different issue than any other well that has been constructed in the past or requires proper pump test data to be collected. Well drilling is a dangerous job by its nature and collecting accurate hydrologic pump test data is required.

The last issue, again raised by the driller, is that by not connecting pump controls it can be said that the permanent pump is not really installed. The driller is proposing that a reasonable alternative would be to allow a submersible of any size to be permanently installed, used for testing, and only after the PIP is issued would the appurtenances that actually allow the pump to operate be installed. However, PIPs only concern the physical portions of the pump which are installed in the casing and set the upper limit of the actual pumping capacity of the well. The Commission does not require permits or reports when pump appurtenances outside of the casing, such as controls, meters, connections, etc. are modified nor is it necessary to track (with the possible exception of meters). Staff feels this issue is irrelevant since the main issue is one of data vs. economic savings afforded the permittee.

Ultimately, if the permittee can comply with the pump test standards, in a timely manner, using the permanent submersible pump, there should be no problem allowing for its installation prior to the issuance of the PIP. The experience of the PIA-Kona Limited Partnership Wells (Well Nos. 4757-03 & 04) was mixed. The driller did
not give staff a one week notice before faxing results. Also, both the step-drawdown and long-term pump tests were submitted on the same day rather than on separate days right after each test. Further, data was not provided on forms created and used by staff that follow the standards and make it easier for both the driller and staff to understand the data collected. These submission problems caused delays in the staff analysis and PIP issuance turn around. It took staff 2 weeks, rather than the 1 day staff had committed to, to do the complete analysis. Staff does feel that if data is submitted on official forms at the completion of pump tests then we can again commit to a 1 day turnaround for analysis and approval, especially since we have recently hired an additional geologist.

RECOMMENDATION:

That the Commission:

A. Approve the installation of permanent pumps for pump testing in Kamaole Sands AOAO Irrigation Well (4326-10), Makena Surf AOAO Irrigation Well (3926-11), The Fairmont Kea Lani Irrigation Well (4026-13), Maui County Parks Department Lahaina Park Well (5240-07), subject to the standard conditions in Exhibit 6, and the following conditions:

1. The permittee shall notify staff one week in advance of the pump test dates.
2. The pump tests shall be started within one week of the installation of the pumps. Otherwise, the pumps shall be removed.
3. The step-drawdown test shall be performed first and the well allowed to rest for 1 day or until full water level recovery occurs before starting the long-term test.
4. The applicant shall submit pump test results within one day of the completion of each individual pump test on forms provided by the Commission.
5. Staff will complete its analysis of pump results within one business day and issue a pump installation permit if pump tests for the particular well are satisfactory.
6. In the event that a well's pump tests are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with a, b, and c above until they are in compliance with standard pump test requirements.

Respectfully submitted,

LINNEL T. NISHIOKA
Deputy Director

Exhibit(s):

1. (Location Maps)
2. (Declaratory Ruling DEC-ADM 98-G5)
3. (Submittal for Kona-PIA Limited Partnership Well (Well No. 4757-03 & 04), January 30, 2002)
4. (Standard Well Construction Permit Conditions)
5. (Pump Test Procedures)
6. (Standard Pump Installation Permit Conditions)
**DRILLER'S LOG**

**WELL NUMBER:** 4326-10

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Remarks:
As you have the Well Construction Permit for Kameole Sands APAD Irrigation Well (4826-10), you can proceed as the conditions and standards require.

1) If a depth of theoretical thickness of the aquifer (10 x standing head) were required, it must be specifically requested, and we can add special conditions administratively.

2) If installation of the permanent pump to run required pump tests is requested, it also must be specifically requested, but that has to be approved by the Commission. Next time it comes up, however (you said you would request it here) we'll ask for delegation — to do it administratively, too.

We do have the 2) request on file, so will proceed to request a variance. Meanwhile, with the Construction Permit in hand, you can drill but not yet install a permanent pump for testing.
Wailani Drilling Company
Mike Robertson 655 Kulike Road Haiku, Maui, Hawaii 96708
Ph. 808/572-2673 Fax 572-0925 Cellular 264 7079

Return Notice Fax Memo

For: Charlie Ice

Notice to start work on Kamaole Sands well #4326-10 on 4/23/02

Also, Charlie there is a possibility we can engineer this well at 70 gpm or less and use the DEC-ADM 98-65. Will let you know tomorrow if I can find correct pump to accomplish this?

Please sign and return.

Thanks, Bill Steele

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at 808-572-0925.

From: Bill Steele
ATTN: CHARLEY ICE

KAMAOLE SANDS

WELL PERMIT.

1808-587-0219
April 17, 2002

Mr. Todd Brown
Kamaole Sands AOAO
2695 South Kihei Road
Kihei, Hi 96753

Dear Mr. Brown:

Well Construction Permit
Kamaole Sands AOAO Irrigation Well (Well No. 4326-10)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for your permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 13:

Special Conditions

1. Attached for your Information is a copy of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

2. Well depth shall not exceed one-fourth the theoretical aquifer thickness.

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit. However, a permanent pump may be installed prior to the permanent pump installation permit issuance in accordance with the Commission's April 15, 1998 Declaratory Ruling No. DEC-ADM98-G5, which states that:

"Permanent pump installation for capacities between 0-10 gpm and where the proposed use is for private individual needs in non-ground-water management areas may be allowed prior to the final pump installation permit issuance. When required as a condition of the well construction permit, subsequent pumping tests shall validate the acceptability of the permanent pump. The permanent pump installed prior to final pump installation permit issuance is subject to removal if the testing shows that a smaller pump is required to reduce the potential of affecting neighboring wells and localized upconing at the applicant's well."

If you qualify and wish to take advantage of this ruling, please include a written request to install the permanent pump prior to final pump installation permit issuance when you return to us your signed well construction permit.
Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.

**IMPORTANT** - Drilling work shall not commence until a fully signed permit is returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures

c: Wailani Drilling, Inc.
WELL CONSTRUCTION PERMIT

Kamaole Sands AOAO Irrigation Well, Well No. 4326-10

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

In accordance with the Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Sections 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Kamaole Sands AOAO Irrigation Well (Well No. 4326-10) at 2895 South Kihei Road, Maui, TMK 3-9-4-A, subject to the Hawaii Well Construction & Pump Installation Standards (12/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 821, Honolulu, HI 96809, shall be notified, in writing, at least two weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1/4-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pumping test event is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In persons ground water, the depth of the well may not exceed one-fourth of the theoretical thickness of the drainage layer at the time of installation. The well shall not be more than sixty (60) days after completion of work.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any disturbed areas as soon as possible.

5. In the event that surface water remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department's Historic Preservation Program immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well will not constitute a determination of correlative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, MSL) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1987; HWWS). If the HWWS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

11. If the well is not to be used it must be properly capped. If the well is to be abandoned, the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(0) prior to any well sealing or plugging work.

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

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

Date of Approval: April 1, 2002
Expiration Date: April 1, 2004

GILBERT S. GOLOMA-AGARAN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I agree 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 do the driller have signed, dated, and returned the permit to the Commission. I also understand that noncompliance with any permit condition may be grounds for revocation and fines of up to $1,000 per day starting from the permit date of approval.

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

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

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

Attachment:

USGS
Department of Health Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
Wai'anae Drilling, Inc.
April 17, 2002

Mr. Todd Brown
Kamaole Sands AOAO
2695 South Kihei Road
Kihei, HI 96753

Dear Mr. Brown:

Well Construction Permit
Kamaole Sands AOAO Irrigation Well (Well No. 4326-10)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for your permanent pump. As part of the Chairperson’s approval, the following special conditions were added and are part of your permit under Permit Condition 13:

Special Conditions

1. Attached for your information is a copy of the Department of Health’s (DOH) review comments. Please note DOH’s requirements related to discharge of effluent from well drilling and testing activities.

2. Well depth shall not exceed one-fourth the theoretical aquifer thickness.

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit. However, a permanent pump may be installed prior to the permanent pump installation permit issuance in accordance with the Commission’s April 15, 1998 Declaratory Ruling No. DEC-ADM98-G5, which states that:

“Permanent pump installation for capacities between 0-70 gpm and where the proposed use is for private individual needs in non-ground-water management areas may be allowed prior to the final pump installation permit issuance. When required as a condition of the well construction permit, subsequent pumping tests shall validate the acceptability of the permanent pump. The permanent pump installed prior to final pump installation permit issuance is subject to removal if the testing shows that a smaller pump is required to reduce the potential of affecting neighboring wells and localized upconing at the applicant’s well.”

If you qualify and wish to take advantage of this ruling, please include a written request to install the permanent pump prior to final pump installation permit issuance when you return to us your signed well construction permit.
Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.

**IMPORTANT** - Drilling work shall not commence until a fully signed permit is returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures

C: Wailani Drilling, Inc.
**WELL CONSTRUCTION PERMIT**

*Kamaole Sands QAO AO Irrigation Well, Well No. 4326-10*

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Kamaole Sands QAO AO Irrigation Well (Well No. 4326-10) at 2695 South Kihei Road, Maui, TMK 3-9-4:4, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences, and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1¼-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basalt ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basalt ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department's Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

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

9. The well construction permit application is incorporated by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence waste is wasted or contaminated, a lien on the property may result.

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

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

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

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

Date of Approval: April 1, 2002
Expiration Date: April 1, 2004

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee’s Signature: ___________________________ Date: ______________
Printed Name: ___________________________ Firm or Title: ___________________________
Driller’s Signature: ___________________________ C-57 License #: ___________________________ Date: ______________
Printed Name: ___________________________ Firm or Title: ___________________________

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

Attachment

C: USGS
Department of Health’s Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
Wallani Drilling, Inc.
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR PERMIT ISSUANCE


DATE: 15 APR 02 SUSPENSE DATE:

TO: INIT. TO: INIT. FOR: PLEASE:
----- ----- ----- ----- 
BAUER, G. CHING, F. LUM, A. NAKAMA, L. NAKANO, D. 3 Approval 3 Signature 4 Information
FUJII, N. HARDY, R. NISHIOKA, L. OHYE, M. ------- -------
HIGA, D. HIRANO, E. SAKODA, E. ------- -------
ICE, C. IMATA, R. SUBIA, S. SWANSON, S. ------- -------
JINNAI, R. KUNIMURA, I. UYENO, D. YODA, K. ------- -------

WELL NUMBER 4826.10 WELL NAME Kamaole Sands AOG-1w.

WELL CONSTRUCTION
ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 PUMP TEST
4 DOH COMMENTS
5 LAND DIV. COMMENTS
6 WCR FORM

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY

PUMP INSTALLATION
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
**SECTION 1: WELL LOCATION INFORMATION**

<table>
<thead>
<tr>
<th>Island</th>
<th>Aquifer System</th>
<th>Proposed Use</th>
<th>Proposed Withdrawal</th>
<th>Irrigation</th>
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<tr>
<td>MAUl</td>
<td>CENTRAL</td>
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<td></td>
<td></td>
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<tr>
<td>Aquifer Sector</td>
<td>KAMAOLE</td>
<td><strong>System Sustainable Yield</strong></td>
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**SECTION 2: WELL SECTION DATA** (enter data in grey cells only)

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<thead>
<tr>
<th>Elevation at top of casing</th>
<th>Solid Casing</th>
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<tr>
<td></td>
<td>Material</td>
</tr>
<tr>
<td></td>
<td>Length</td>
</tr>
<tr>
<td></td>
<td>Diameter</td>
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<tr>
<td></td>
<td>Wall Thickness</td>
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<table>
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<tr>
<th>Ground Elevation</th>
<th>Rock Packing</th>
<th>Cement Grout</th>
<th>Hole Diameter</th>
<th>Total Depth</th>
<th>Estimated Head</th>
<th>Calculated Aquifer Thickness</th>
<th>County Water Supply (Y/N ?)</th>
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</thead>
<tbody>
<tr>
<td>ft., m.s.l.</td>
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<td>ft.</td>
<td>in.</td>
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<td>ft.</td>
<td>20.5 ft.</td>
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<th>County Water Supply (Y/N ?)</th>
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<th>Openings</th>
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<td>sq.in./l.f.</td>
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**SECTION 3: CHECKLIST** (values to check are shaded)

<table>
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<th>Well Depth</th>
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<tr>
<td>Theoretical Thickness of Aquifer</td>
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<tr>
<td>1/4 Aquifer Thickness</td>
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<td>Depth of Well below Sea Level</td>
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<table>
<thead>
<tr>
<th>Well Casing</th>
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<tbody>
<tr>
<td>Minimum Wall Thickness</td>
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<tr>
<td>Material</td>
</tr>
<tr>
<td>County or Non-County</td>
</tr>
<tr>
<td>Minimum Thickness per standards</td>
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<tr>
<td>Wall Thickness Provided</td>
</tr>
<tr>
<td>Minimum Length of Solid Casing 90% of ground to top of aquifer</td>
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<tr>
<td>Length of solid casing Provided</td>
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<td>Casing Material</td>
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<td>If the cell above reads #N/A, reference HWCPIS</td>
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<tr>
<td>Depth of Grouting Calculated Depth of Grouting</td>
</tr>
<tr>
<td>Depth of Grouting provided</td>
</tr>
<tr>
<td>Thickness of Annular Space</td>
</tr>
</tbody>
</table>
MEMORANDUM

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

FROM: Don Hibbard, Administrator
State Historic Preservation Division

SUBJECT Chapter 6E-42 Historic Preservation Review Pertaining to the Well Construction/Pump Installation Permit Application for the Proposed Kama‘ole Sands AOAO Irrigation Well (Well No.: 4326-10)
Kama‘ole Ahupua‘a, Wailuku District, Island of Maui
TMK: (2) 3-9-004:004

April 5, 2002

Thank you for the opportunity to review and comment on the Well Construction/Pump Installation Permit Application for the Proposed Kama‘ole Sands AOAO Irrigation Well Site, which was received by this office on March 19, 2002. Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was conducted of the subject parcel.

A search of our records indicates an archaeological inventory survey has not been conducted of the subject parcels. The general area of coastal Kihei was once the location of pre-Contact habitation, perhaps including scattered burials. The USDA Soil Survey indicates the subject property is in Dune Lands, which are known to contain isolated and clusters of human burials and habitation sites in the subsurface deposits. Therefore, we believe it is possible that these types of sites may be present on the subject property.

Given the above information, we recommend a qualified archaeological monitor be present during all ground disturbing activities in order to identify, document, record, and provide appropriate mitigation measures, as necessary. This should mitigate any adverse effects to significant historic sites that might occur. An acceptable monitoring plan will need to be submitted to this office for review prior to the commencement of any ground altering activities. An acceptable report documenting the findings of the monitoring activities will need to be submitted to this office for review upon 180 days following the completion of the proposed undertaking.

Please call Cathleen Dagher at 692-8023 if you have any questions.

CD:jen
TO: Honorable Bruce S. Anderson, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch
   Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
   Alec Wong, Clean Water Branch

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

SUBJECT: Well Construction/Pump Installation Permit Application
         Kamaole Sands AOAO Irrigation Well (Well No. 4326-10)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 1, 2002. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-0251.

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 16 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 16 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

[ ] If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

[ ] It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

[ ] For the applicant's information, a source of possible wastewater contamination [ ] is located near the proposed well site (information attached).

[ ] An NPDES permit is required.

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

[X] No comments/objections

Contact Person: Lori N. Kajiwara
   Phone: 586-0429

Signed: Lori N. Kajiwara
   Date: 3-28-2002
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 62
HONOLULU, HAWAII 96808

March 18, 2002

TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
Alec Wong, Clean Water Branch

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

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Kamaole Sands AOAO Irrigation Well (Well No. 4326-10)

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Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 808-586-4251.

Class
Attachment(s)

RESPONSE:

[1] This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 29, Rules Relating to Potable Water Systems, §11-30-28.

[1] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

[1] If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow prevention, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

[1] It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

[1] For the applicant's information, a source of possible wastewater contamination [1] is not located near the proposed well site (information attached).

[1] An NPDES permit is required.

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

[1] No comments/objections

Contact Person: Bill Wong
Phone: 586-4258

Signed: Bill Wong
Date: 4/1/02
The Department of Health, Safe Drinking Water Branch has the following additional comments for the Well Construction / Pump Installation Permit Application for the Kamaole Sands AOAO Irrigation Well (Well No. 6-4326-10 Maui):

1. It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water regulations. However, steps should be taken to prevent both direct human consumption of this water, and cross-connections with any potable water supply. If the user receives water from the Maui Department of Water Supply, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots and piping as “NON-POTABLE”, to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested. The Maui Department of Water Supply must be notified as they may require a backflow preventer on their service connection to AOAO Kamaole Sands.

2. Please be advised that the Department of Health has experienced drinking water and groundwater contamination by submersible pumps containing mercury. Specifically, the failure of the seals of the pumps allowed mercury to leak out into the well shaft resulting in contamination of the well and the water served by the well. Please review your pump specifications to be sure that the submersible pump(s) you propose to use does not contain materials which could result in either groundwater contamination or drinking water contamination.
TO: Harry Yada, Acting Administrator
   Land Division
FROM: Linnel T. Nishioka, Deputy Director
       Commission on Water Resource Management
SUBJECT: Well Construction/Pump Installation Permit Application
         Kamaole Sands AOAO Irrigation Well (Well No. 4326-10)

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

We would appreciate your comments on the captioned application with regard to the
programs, plans, and objectives specific to your division. Please respond by returning this cover
memo form by April 1, 2002. If we do not receive comments or a request for additional review time
by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about
this permit application, request additional information, or request additional review time, please
contact Charley Ice of the Commission staff at 587-0251.

RESPONSE:

[ ] A water lease/permit is required of this applicant and an application for such will be requested by our
division.

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

[ ] A water lease/permit has been obtained by the applicant through lease no. _____________________________.

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

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

[ ] No objections

[ ] Other comments: Original source of private title is Grant 5008 issued prior to Statehood in 1959

Contact Person: Gary Martin
Phone: 587-0421

Signed: [signature]
Date: MAR 22 2002
March 18, 2002

Mr. Todd Brown
Kamaole Sands AOAO
2695 South Kihei Road
Kihei, HI 96753

Dear Mr. Brown:

Well Construction/Pump Installation Permit Application for Well No. 4326-10

We acknowledge receipt, on March 6, 2002, of your completed Well Construction/Pump Installation permit application and filing fee for the Kamaole Sands AOAO Irrigation Well (Well No. 4326-10). You can expect your application to be processed within ninety (90) days from this date.

For your information, the process of constructing a well is normally regulated and permitted in two (2) steps. First, a well construction permit is issued for drilling and testing purposes only. Based upon information provided by you through a Well Completion Report Part 1 (Well Construction), a pump installation permit (upon completed application) may then be issued to authorize pump work. If a pump is installed then a Well Completion Report Part 2 (Pump Installation) is required.

If you have any questions about your permit application, please contact Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

Cl:ss

c: Wailani Drilling, Inc.
TO: Honorable Bruce S. Anderson, Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch  
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response  
Alec Wong, Clean Water Branch

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

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Kamaole Sands AOAO Irrigation Well (Well No. 4326-10)

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RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-20.

This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

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

An NPDES permit is required.

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

No comments/objections

Contact Person: ___________________________ Phone: ______________

Signed: ___________________________ Date: ______________
March 18, 2002

TO: Harry Yada, Acting Administrator
    Land Division

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

SUBJECT: Well Construction/Pump Installation Permit Application
         Kamaole Sands AOAO Irrigation Well (Well No. 4326-10)

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Class
Attachment(s)

RESPONSE:

[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.

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

[ ] A water lease/permit has been obtained by the applicant through lease no. _____________________________.

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________ Phone: _______________

Signed: ____________________________ Date: _______________
Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by April 1, 2002. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-0251.

CLASS
Attachment(s)

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ___________________________ Phone: __________

Signed: ___________________________ Date: __________
<table>
<thead>
<tr>
<th>APP</th>
<th>OBJ</th>
<th>COST</th>
<th>CTR</th>
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<th>PH</th>
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MARKS:
- LINE (1) Well No. 5620-05 & 06 (WCPA/PIPA)
- LINE (2) Well No. 5620-06 (WCPA/PIPA)
- LINE (3) Well No. 4702-01 (WCPA/PIPA)
- LINE (4) Well No. 4326-10 (WCPA/PIPA)
When installing the permanent pump to conduct the aquifer pump testing required under this permit, prior to issuance of the pump installation permit, the following sequence shall be followed:

a. The pump tests shall be started within one week of staff requests that the pump test be rerun. Other staff requests that the pump test be rerun.

b. Staff shall be notified one week prior to the pump test.

c. The applicant shall submit pump test results within 30 days of pump testing.

d. Staff will complete its analysis of pump results within 30 days of the pump test.

e. In the event that pump tests are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with a., b., and c. above until they are in compliance with standard pump test requirements.

f. During the period of pump testing, no power supply or electrical controller of permanent nature shall be installed. If testing equipment is removed, wellhead shall be locked.
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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed.

http://webre1.hawaiiinformation.com/REsearch/Asp/Functions/Property/SearchTMK.asp?ACT=R3/7/02
Return Receipt Fax Memo

For: Charlie Ice

Charlie. Enclosed are the following items:

- Application for Well Permit/Kamaole Sands
- Application for Well Permit/Harlow
- Application for Well Permit/Moretti Well #2
- Well Permit Luana Kai/4527-15
- Well Permit Makena Surf/3926-11

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at 808-572-0925.

From: Bill Steele
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

For Official Use Only:

APPLICATION FOR PERMIT

1. (a) [ ] WELL OWNER: *ROA KO HAMAKAI S* Contact Person: *Taro Bezu* Phone: 808-874-9700
   Mailing Address:
   Fax: 808-874-7237
   E-mail: 

   (b) [ ] LAND OWNER: Same Contact Person: Phone: 
   Mailing Address:
   Fax: 
   E-mail: 

   (c) [ ] CONTRACTOR: *WAIKOU DRILLING* Contact Person: *Mike Robertson* Phone: (808) 572-2473
   Mailing Address: 455 Kulike Rd.
   Fax: 808-572-8925
   E-mail: 

   Site Approved: 2015

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

2. WELL NAME: *KAMA OLE SANDS* island: 
   Address: 2485 S. Kila, Maui HI 96753
   Test Map Key: 3 9 04

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

   *State Well No.:
   (if unknown, please call Commission at 808-0229)

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

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

   Pump Type (check one):
   [ ] Deep Well Turbine
   [ ] Rotary
   [ ] Propeller
   [ ] Submersible
   [ ] Rotary-Displacement
   [ ] Reciprocating
   [ ] Centrifugal
   [ ] Rotary-Gear
   [ ] Impulse

6. PROPOSED USE:
   (check all that apply)
   [ ] Industrial
   [ ] Municipal (including hotels, stores, etc.)
   [ ] Domestic (individual, noncommercial water system)
   [ ] Irrigation (crop)
   [ ] Landscape
   [ ] No. of Acres: 15
   [ ] Military
   [ ] Other (explain): 

7. (a) PROPOSED AMOUNT OF WITHDRAWAL:
   [ ] 75,000 gallons per day

   (b) METHOD OF FLOW MEASUREMENT:
   [ ] Flowmeter
   [ ] Openpipe
   [ ] Well
   [ ] Orifice
   [ ] Other (explain): 

   OTHER IMPORTANT INFORMATION:

   [ ] LEGAL REQUIREMENTS: [ ] OHP [ ] SNAP [ ] ES [ ] EA
   (None) [ ] Other (explain): 

   9. REMARKS, EXPLANATIONS:
   
   (If more space is needed, please attach additional sheet)

   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 applicant shall submit to the Commission a well completion/installation report within 60 days after the completion date of the permitted work; 3) any water or water data shall be submitted to the Commission; 4) such approval shall not preclude or affect the retention of competitive water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

   Well Owner: A. KO HAMAKAI S
   Sandowner: A. KO HAMAKAI S
   Signature: [Signature]
   Date: 2/25/02

   Landowner: [Name]
   Signature: [Signature]
   Date: 2/25/02

   For current use only
   Latitude:
   Longitude:
   Aquifer System No: [State Well No: 4326-40]
10. PROPOSED WELL SECTION

(Attach schematic if different from sketch provided below)

Elevation at top of casing = \( \frac{61}{10} \) ft, m.s.l.

Minimum of 2' radius & 4' thick concrete pad to contain benchmark surveyed to nearest 0.01 ft

Ground Elevation = \( \frac{60}{10} \) ft, m.s.l.

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

Solid Casing: (n/a) x (Ground Elev. - Water Level Elev.)

Total Length: \( \frac{6.5}{10} \) ft

Nominal Diameter: \( \frac{4}{0} \) in

Wall Thickness: \( \frac{2.5}{0} \) in

Bottom Elevation: \( \frac{5}{10} \) ft, m.s.l.

Open Casing: \( \frac{5}{10} \) Screen

Total Length: \( \frac{2.6}{10} \) ft

Nominal Diameter: \( \frac{4}{0} \) in

Wall Thickness: \( \frac{2.5}{0} \) in

Bottom Elevation: \( \frac{5}{10} \) ft, m.s.l.

Note: Neither blanket nor mud should be used in saturated zones during drilling

Open Hole:

Length: \( \frac{N A}{10} \) ft

Diameter: \( \frac{4}{0} \) in

Bottom Elevation: \( \frac{5}{10} \) ft, m.s.l.

The approximate elevation must be referenced to mean sea level (msl) at the time of application. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

For non-salt water Based Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

Bottom Elevation of Well Limit = (Water Elevation - 4 x Water Level Elev.)

Example: Estimated + 2 ft Water Level Elev. – Bottom Elevation of Well Limit = \( \left( \frac{2}{-4.5} \right) \) = -18.5 ft

Solid Casing Material:

Carbon Steel: compliant with (check one or more): ANSI/AWWA C200 0 API Spec. 5L 0 ASTM A53 0 ASTM A139

And compliant with (check one or more): ASTM A106 0 Type E 0 Type B 0 Other

Stainless Steel: (check one):

0 ASTM A403 (production welds) 0 ASTM A179 (pre-weld)

ABS Plastic conforming to ASTM F490 and ASTM D1827 (check one):

0 Schedule 40 0 Schedule 80

PVC Plastic conforming to ASTM F490 and (ASTM D1765 or ASTM D2241) (check one):

0 Schedule 40 0 Schedule 80 0 Schedule 120

Thermoplastic: (check one):

0 High Density Polyethylene Pipe conforming to ASTM D2999

Open Casing Material:

Carbon Steel: compliant with (check one or more): ANSI/AWWA C200 0 API Spec. 5L 0 ASTM A53 0 ASTM A139

And compliant with (check one or more): ASTM A106 0 Type E 0 Type B 0 Other

Stainless Steel: (check one):

0 ASTM A403 (production welds) 0 ASTM A179 (pre-weld)

ABS Plastic conforming to ASTM F490 and ASTM D1827 (check one):

0 Schedule 40 0 Schedule 80

PVC Plastic conforming to ASTM F490 and (ASTM D1765 or ASTM D2241) (check one):

0 Schedule 40 0 Schedule 80 0 Schedule 120

Thermoplastic: (check one):

0 High Density Polyethylene Pipe conforming to ASTM D2999

0 Centrifugally Cast Resin Pipe conforming to ASTM D2997

0 Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D6517

0 Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C605

0 PTFE Fluorocarbon Tubing conforming to ASTM D2229

0 Fluorocarbon Tubing conforming to ASTM D2229

0 PTFE Fluorocarbon Tubing conforming to ASTM D2229
REQUEST for VARIANCE

Wailani Drilling Inc. Lic.#C57-20115
Bill Steele    655 Kulike Road    Haiku, Maui, Hawaii 96708
Ph.808.572-2673    Fax 572-0925    Cellular 264-7079

1/3/02

REQUEST for VARIANCE

To: Charlie Ice
For: State of Hawaii Water Resource Commission
From: Wailani Drilling

Well name: Kamaole Sands Condominium
Well Number:

Variance Type: Procedural
Variance Requested:

1. Do not remove the pump that was installed for testing the well and use it as permanent pump.

Variance Procedure:

1. To leave "test pump only" in well after pump test and DO NOT leave or install any power supply or pump controllers at well site or with owner.
2. To secure wellhead with lock and/or seal to prevent any possible use while pump test data is reviewed and evaluated for issuance of pump permit. (usually 60-90 day period)
3. Sign Pump Installation Permit
4. Remove lock and seal, install pump controller, hard wire pump for permanent use.

State Standard Procedure:

1. To remove pump after testing
2. Pump test data is reviewed and evaluated for issuance of pump permit
3. Sign Pump Installation Permit
4. Reinstall pump for permanent use.

Certified By And A Member Of The National Ground Water Association
REQUEST for VARIANCE

Comments/Remarks:

Mike Robertson, President
Wailani Drilling

Certified By And A Member Of The National Ground Water Association
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

WELL & PUMP INFORMATION:

1. WELL OWNER: AADAM KAMA'I S VANDS
   Contact Person: Joon Borchard
   Phone: 808-874-8700
   Mailing Address:
   Fax: 808-879-3273

2. WELL NAME: KAMA'I S VANDS
   Island: MAUI
   Address: 240 S. KIHEI, MAUI, HI
   Mailing Address:
   Fax: 808-879-3273

3. PROPOSED WORK:
   (check all that apply)
   [ ] Construct New Well
   [ ] Modify Existing Well
   [ ] Abandon/Sell
   [ ] Install New Pump
   [ ] Modify Pump

   State Well No.: __________________________
   (If unknown, please call Commission at 808-662-2225)

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

5. PROPOSED PUMP INFORMATION:

   Pump Type (Check one):
   [ ] Deep Well Turbine
   [ ] Submersible 20 HP.
   [ ] Centrifugal
   [ ] Rotary
   [ ] Rotary-Displacement
   [ ] Reciprocating
   [ ] Impulse

   Rated Pump Capacity: 180 gallons per minute

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

   Water Source: [ ] Surface Water [ ] Groundwater
   [ ] Other [ ] No
   Use: [ ] Yes [ ] No
   Other [ ] No
   (explain)

7. (a) PROPOSED AMOUNT OF WITHDRAWAL:

   [ ] 75,000 gallons per day
   [ ] Other (explain)

8. LEGAL REQUIREMENTS:
   [ ] CDUP
   [ ] DPAP
   [ ] ESA
   [ ] EA
   [ ] Other
   8. REMARKS, EXPLANATIONS:

   [ ] 180 gpm @ 60 ps

   9. SIGNATURES:

   [ ] Well Owner
   [ ] Landowner
   [ ] Contractor

   Signature
   Date

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

"18

Keawakagu (Site)

LilihoHo

Water Tank

HW

E

Sea

Water Tank

Keawakagu

ZONE 2

PAEAHU