MEMO and ROUTE SLIP

WCR 2 Check for Well No. 1751-08 (survey to regulation memo)

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

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

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

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

   Stream Surface Water Impacted:
   - If yes, identify most probable stream

2. Pump Installation Check Mitch Ohye (initial)
   - data complete
   - followed WCPI Stds
   - well database updated

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

4. Roy (initial) check

5. Susan Subia (initial) finalize

6. Linnel (initial) signature

7. Charley Lenore Ryan File
Dr. Louis M. Herman
Kewalo Basin Marine Mammal Lab
1129 Ala Moana Blvd.
Honolulu, HI 96814

Dear Dr. Herman:

Well Completion Report for Well No. 1751-08

We received your Well Completion Report Part II for the Kewalo Basin (Well No. 1751-08) on September 25, 2001 and acknowledge that it is complete. Thank you for also returning a signed copy of the permit. This completes the regulatory requirements of the well construction and pump installation permits for Well No. 1751-08.

If you have any questions, please contact Lenore Nakama of the Commission staff at 587-0218.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LN:ky
c. William Moore, Beylik Drilling
# State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 821, Honolulu, Hawaii 96806. 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 808-587-2228. For updates to this form or additional information, please visit our website at [http://www.state.hi.us/dlnr/cwr/](http://www.state.hi.us/dlnr/cwr/)

<table>
<thead>
<tr>
<th>1. State Well No.:</th>
<th>1751-08</th>
<th>Well Name: Kewalo Basin</th>
<th>Island: Oahu</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address:</td>
<td>Kewalo Basin</td>
<td>Tax Map Key: 2-1-68:60</td>
<td></td>
</tr>
<tr>
<td>4. Date Pump Installed:</td>
<td>8-3-01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. PERMANENT PUMP INFORMATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump Type, Make, Serial No.:</td>
<td>Goulds Submersible 23661 74025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated Capacity:</td>
<td>1000 gpm at head of: 60 ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Type, H.P., Voltage, rpm:</td>
<td>Franklin, 40 HP, 460V, 3450 RPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of flow meter:</td>
<td>which measures in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump type (check one):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep Well Turbine</td>
<td>Rotary</td>
<td>Propeller</td>
<td></td>
</tr>
<tr>
<td>Submersible</td>
<td>Rotary-Displacement</td>
<td>Reciprocating</td>
<td></td>
</tr>
<tr>
<td>Centrifugal</td>
<td>Rotary-Gear</td>
<td>Impulse</td>
<td></td>
</tr>
<tr>
<td>6. Method of flow measurement:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flowmeter Manufacturer Make Size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weir</td>
<td>Open Pipe</td>
<td>Orifice*</td>
<td>Other*, explain below</td>
</tr>
</tbody>
</table>

*attach schematic

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

8. Other remarks/comments:
The well is installed in a flush mount locking vault approximately 6 inches below grade.

---

Pump Installation Contractor (print) Beylik Drilling, Inc. C-57/C-57a/A Lic. No. AC-21896
Signature: William C. Moten
Date: 9-24-01

Permittee (print) Loris M. Heman
Signature: Loris M. Heman
Date: 9-24-01
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

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

identify reference point elevation for water level measurements through chase tube
NA ft. mean sea level

describe reference point:
NA

Pump intake depth = 43 ft. (referenced to bench mark)

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

if airline installed, bottom of airline elevation = NA ft. mean sea level
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 Kewalo Basin (Well No. 1751-08) at Kewalo Basin, Oahu, TMK 2-1-58:60, 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 1000 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on 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 in-stream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

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

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

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. The permit is also subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If theHWCPIS 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 six weeks 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 31, 2001
Expiration Date: August 31, 2003

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

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

Permittee's Signature: [Signature]
Name: Louis Herman, Firm or Title: Kewalo Basin Marine Laboratory
Date: 9-24-01

Installer's Signature: [Signature]
Name: William C. Moore, VP, Firm or Title: Beylik Drilling, Inc.
Date: 9-24-01

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
  Honolulu Board of Water Supply
  Jan S. Yokota, HCDA

September 19, 2001, 6:05 PM Kewalo Basin Marine Laboratory
Dr. Louis M. Herman  
Kewalo Basin Marine Mammal Lab  
1129 Ala Moana Blvd.  
Honolulu, HI 96814

Dear Dr. Herman:

Pump Installation Permit  
Kewalo Basin (Well No. 1751-08)

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

**Special Conditions**

1. (NONE)

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

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

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

   Finally, this letter is notice that we have accepted your Well Completion Report - Part I as complete as of August 31, 2001.

   If you have any questions, please call Lenore Nakama of the Commission staff at 587-0218.

Aloha,

[Signature]

GILBERT S. COLOMA-AGARAN  
Chairperson

Enclosure

C: Jan S. Yokota, HCDA
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 Kewalo Basin (Well No. 1751-08) at Kewalo Basin, Oahu, TMK 2-1-58:60, 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 1000 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on 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. The 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 31, 2001
Expiration Date: August 31, 2003

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

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

Permittee's Signature: ___________________________ Date: ________
Printed Name: ___________________________ Firm or Title: ___________________________

Installer's Signature: ___________________________ C-57, C-57a, or A License #: ___________ Date: ________
Printed Name: ___________________________ Firm or Title: ___________________________

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

Attachments
- USGS
  - Department of Health/ Safe Drinking Water & Wastewater Branch
  - Honolulu Board of Water Supply
  - Jan S. Yokota, HCDA
August 31, 2001

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

Subject: Kewalo Basin Transfer Allocation Request

Dear Ms. Nakama:

Attached please find a copy of the Well Construction Report for State Well No. 1751-08 at the Kewalo Basin Marine Mammal Lab. Please note, at this time we would like to request a transfer in allocation of water usage from State Well No. 1751-05 to State Well No. 1751-08. Should you have any questions or require any further information please do not hesitate to call me.

Sincerely,

Robert A. G lascott
Project Manager
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

WELL COMPLETION REPORT
227/98 WCR Form

Instructions: Please print or type and submit completed report within 60 days after well completion to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96808. An as-built drawing of the well and chemical analysis should also be submitted. For assistance call the Commission Regulation Branch at 587-0225, or 1-800-468-4644 Extension 70225.

1. State Well No.: 1751-08  Well Name: Kewalo Basin  Island: Oahu
2. Location/Address: Kewalo Basin, Oahu  Tax Map Key: 2-1-58-60

PART I. WELL CONSTRUCTION REPORT

4. Name of driller who performed work: John Carroll
5. Type of rig/construction: Bucket Auger Rig
6. Date(s) Well Construction and pump tests (if any) completed: 7-25-01
7. GROUND ELEVATION (referenced to mean sea level, msl): NA ft.
   Well Bench Mark (description/location): NA

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

<table>
<thead>
<tr>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, Dates, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 101</td>
<td>Poorly consolidated Coraline Limestone</td>
</tr>
<tr>
<td></td>
<td>DTW = 6' bgs, 7-24-01</td>
</tr>
</tbody>
</table>

(If more space is needed, continue on back)

9. Total depth of well below ground: 101 ft.
10. Hole size: 30 inch dia. from 0 ft. to 25 ft. below ground
    24 inch dia. from 25 ft. to 101 ft. below ground
11. Casing installed: 14 in. I.D. x 3/8 in. wall solid section to 60 ft. below ground
    14 in. I.D. x 3/8 in. wall perforated section to 100 ft. below ground

Casing Material/Slot Size: Sch 80 PVC/0.25"

12. Annulus: Grouted from 2 ft. below ground to 8 ft. below ground
    Gravel packed from 8 ft. below ground to 101 ft. below ground
13. Initial water level: 6 ft. below ground.
14. Initial chloride: NA ppm
15. Initial temperature: NA °F
16. PUMPING TESTS: Reference Point (R.P.) used: NA
   Date and time of measurement: 7-24-01
   Date and time of sampling: NA
   Date and time of measurement: NA

(1) Step-Drawdown Test Date: NA
   Start water level ______________ ft. below R.P.
   End water level ______________ ft. below R.P.

(2) Long-term Aquifer Test Date: NA
   Start water level ______________ ft. below R.P.
   End water level ______________ ft. below R.P.

17. Pump Test Procedures data & graphs (12/17/87 SDPTD & CRPTD Forms) attached? __ Yes __ No
18. As-built drawings attached? __ Yes __ No
19. Other remarks/comments: (On back of this form)

Well Drilling Contractor (print) Beylik Drilling, Inc. C-57 Lic. No. AC-21896
Signature: ______________ Date: 8-31-01

Surveyor (print) ___________________________ Lic. No. __________
Signature: ______________ Date: __________

Applicant (print) ___________________________ Signature: __________________ Date: 6/27/01
Well Completion Diagram
Beylik Drilling
Job No.: 9340G
Client: Kewalo Basin Marine Mammal Research Laboratory
Job Location: Kewalo Basin
Date Well Constructed: 7/25/01
Remarks: Note the surface completion is flush mount enclosed in a locking traffic rated vault.

Diameter of borehole 30"

Depth of temporary conductor casing (removed after the well was constructed) 25'

Annular Seal, material 1:1 sand slurry

Depth to water 6'

Well Casing, diameter and material 14" Schedule 80 PVC

Top of Gravel Pack 10'

Diameter of borehole 24"

Size of Gravel Used 3/4" from 101' to 56' and 3/8" from 56' to 10'

Top of screen 60'

Screen diameter, slot size, and material 14" Schedule 80 PVC with 1/4" slots

Bottom of screen 100'

Total Depth 101'

NOTE: NOT TO SCALE
EXPLORATORY WELL CONSTRUCTION PERMIT
Kewalo Basin Well, Well No. 1751-08

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 Kewalo Basin Well (Well No. 1751-08) at Kewalo Basin, Oahu, TMK 2-1-58:60, 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 1 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 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 basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee, 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 corollary 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, 1997; HWCPIS). If the HWCPIS 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 (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 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 5, 2000
Expiration Date: April 5, 2002

TIMOTHY E. JOHNS, Chairperson
Commission on Water Resource Management

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

Permittee's Signature: [Signature]
Printed Name: [Printed Name]
Firm or Title: [Firm or Title]
Date: 6/27/01

Driller's Signature: [Signature]
Printed Name: [Printed Name]
C-57 License#: 20778
Date: 6/27/01

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

Attachment:
c: USGS
Department of Health/ Safe Drinking Water, Wastewater, and Clean Water Branches
Honolulu Board of Water Supply
Jan S. Yokota, HCDA

*7/3/01 called Bob Gascoot, correct # is 21896, UN
FACSIMILE TRANSMITTAL

To: Joel Narusawa
Company: UH
Fax Number: 956-3205
Phone Number: 956-9173

From: Ed Sakoda
Date: May 9, 2001
Pages Including Header: 3
Subject: Well Permit

Notes/Comments:
Mr. Matthias Hoffman-Kuhnt  
Kewalo Basin Marine Mammal Laboratory  
1129 Ala Moana Blvd.  
Honolulu, Hawaii 96814

Dear Hoffman-Kuhnt:

Exploratory Well Construction Permit  
Kewalo Basin Well (Well No. 1751-08)

Enclosed are two (2) copies of your approved Exploratory 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. Standard Condition 2 is modified to exempt the permittee from the requirements to install a monitor tube and conduct pumping tests.
2. Standard Conditions 7.b. and 7.e. are waived.
3. The permittee is hereby informed, and agrees as a condition of this permit, that the issuance of the exploratory drilling permit shall in no way prejudice any future consideration by the Commission on the issuance or non-issuance of a water use permit.
4. The pump installation permit application for Well No. 1751-08 will be cancelled if a water use permit application is not received before the well construction is completed.

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.

Please sign and have the contractor sign both permit originals and return one for our files.

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 the Commission staff at 587-0218.

Aloha,

TIMOTHY E. JOHNS  
Chairperson

Enclosures
EXPLORATORY WELL CONSTRUCTION PERMIT
Kewalo Basin Well, Well No. 1751-08

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 Kewalo Basin Well (Well No. 1751-08) at Kewalo Basin, Oahu, TMK 2-1-58:60, 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 §13-188-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 11/4-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 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 basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee, 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 into this permit 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 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 (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 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 5, 2000
Expiration Date: April 5, 2002

TIMOTHY E. JOHNS, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the 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/ Safe Drinking Water, Wastewater, and Clean Water Branches
Honolulu Board of Water Supply
Jan S. Yokota, HCDA
**SECTION 1: WELL LOCATION INFORMATION**

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

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<tr>
<th>Elevation at top of casing</th>
<th>ft., m.s.l.</th>
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<td>Cement Grout</td>
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<td>Estimated Head</td>
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<td>Calculated Aquifer Thickness</td>
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<td>County Water Supply (Y/N ?)</td>
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</tr>
</tbody>
</table>

**SECTION 3: CHECKLIST** *(values to check are shaded)*

**Well Depth**
- Theoretical Thickness of Aquifer: 0 ft.
- 1/4 Aquifer Thickness: 0 ft.
- Depth of Well below Sea Level: 49.6 ft. **too deep** *(refer to HWCPIS Section 2.2)*

**Well Casing**
- Minimum Wall Thickness: PVC non-county
  - Material: PVC non-county
  - County or Non-County: non-county
  - Minimum Thickness per standards: 0.687 in.

**Annular Space**
- Depth of Grouting Calculated: 7.14 ft.
- Depth of Grouting provided: 10 ft. **okay** *(refer to HWCPIS Section 2.6 c)*
- Thickness of Annular Space: 5 in. **okay** *(refer to HWCPIS Section 2.6 d)*
TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch

FROM: Timothy E. Johns, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application
Kewalo Basin Well (Well No. 1751-08)

Transmitted for your review and comment is a copy of the captioned well application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 10, 2000.

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 Lenore Nakama of the Commission staff at 587-0218.

Attachment(s)

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

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

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

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

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

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

No comments/objections

Contact Person: Leni N. Kajiwara

Signed: Leni N. Kajiwara

Date: 4-3-2000

Phone: 587-4294

RECEIVED:

Bruce S. Anderson, Chairperson

William Wong, Safe Drinking Water Branch

Lenore Nakama, Staff

Date: 4-3-2000
TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
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2. 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 the source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

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

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

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

8. No comments/objections

Contact Person: William Wong
Phone: 586-4258

Signed: William Wong
Date: MAR 31 2000
The Department of Health, Clean Water Branch has the following comments:

1. For Well-Drilling Activities

Any discharge to State waters of treated process wastewater effluent associated with well drilling activities is regulated by Hawaii Administrative Rules, Title 11, Chapter 55, Appendix I, effective September 22, 1997. Treated process wastewater effluent covered by this general permit includes well drilling slurries, lubricating fluids wastewaters, and well purge wastewaters. This general permit does not cover well pump testing. The applicable Notice of Intent Forms and filing fee shall be submitted at least thirty (30) days before the start of discharge to the Department of Health, Clean Water Branch at 919 Ala Moana Boulevard, Room 301, Honolulu, Hawaii 96814-4920 or P.O. Box 3378, Honolulu, Hawaii 96801-3378. Inquiries may be directed to the Clean Water Branch at (808) 586-4309 or by fax at (808) 586-4352.

2. For Well Pump Testing

The discharger shall take all measures necessary to prevent the discharge of pollutants from entering State waters. Such measures shall include, if necessary, containment of the initial discharge until the discharge is essentially free of pollutants. If the discharge is entering a stream or river bed, best management practices shall be implemented to prevent the discharge from disturbing the clarity of the receiving water. If the discharge is entering a storm drain, the discharger must obtain written permission from the owner of that storm drain prior to discharge. Furthermore, best management practices shall be implemented to prevent the discharge from collecting sediments and other pollutants prior to entering the storm drain.

JS/cr
TO: Dean Y. Uchida, Administrator
Land Division

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

SUBJECT: Well Construction/Pump Installation Permit Application
Kewalo Basin Well (Well No. 1751-08)

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

We would appreciate your comments on the captioned with regard to the programs, plans, and objectives specific to your division. Specifically, Item 9 on the application has been added per your request concerning water lease/permits administered by your division. Please respond by returning this cover memo form by April 10, 2000.

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 Lenore Nakama of the Commission staff at 587-0218.

LN:ss
Attachment(s)

RESPONSE:

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

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

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

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

[ ] No objections

☒ Other comments: State land under the operation of Executive Order No. 2644 to DOT, Harbors Div. Acquired by the Territory of Hawaii from Victoria Ward in 1910.

Contact Person Gary Martin Phone: 587-0421

Signed: Gary Martin Date: MAR 31 2000
Mr. Matthias Hoffmann-Kuhnt
Kewalo Basin Marine Mammal Laboratory
1129 Ala Moana Blvd.
Honolulu, HI 96814

Dear Mr. Hoffmann-Kuhnt:

Well Construction / Pump Installation Permit Application for Well No. 1751-08

We acknowledge receipt, on March 15, 2000, of your completed well construction / pump installation permit application for the Kewalo Basin Well (Well No. 1751-08). 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.

As discussed during your March 15, 2000 telephone conversation with a member of my staff, approval of a water use permit is required prior to, or concurrent with, approval of your pump installation permit. A copy of our water use permit application form and our administrative rules for processing the application has been sent to you in a separate packet.

If you have any questions about your permit application, please contact Lenore Nakama of the Commission staff at 587-0218.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

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

FROM: Timothy E. Johns, Chairperson
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[ ] Other relevant DOH rules/regulations, information, or recommendations are attached.

[ ] No comments/objections

Contact Person Phone: 

Signed: Date: 
TO: Dean Y. Uchida, Administrator
Land Division

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

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LN:ss
Attachment(s)

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

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

[ ] No objections

[ ] Other comments:

Contact Person __________________________________________ Phone: ____________________

Signed: ____________________________ Date: ____________________
University of Hawai‘i at Manoa
Kewalo Basin Marine Mammal Laboratory
1129 Ala Moana Blvd. • Honolulu, Hawaii 96814
Telephone: (808) 591-2121 • Fax: (808) 597-8572

FACSIMILE TRANSMITTAL SHEET

TO: Lenore Nakama
FROM: Matthias Hoffmann-Kuhnt

COMPANY: Commission of Water Resource Management

DATE: 03/15/00

FAX NUMBER: 587-0219
PHONE NUMBER: 587-0218

RE: Completion of well app.

□ URGENT □ FOR REVIEW □ PLEASE COMMENT □ PLEASE REPLY □ PLEASE RECYCLE

NOTES/COMMENTS:

Lenore,

Attached please find the completed items of our well application. If you have any other questions please contact me @ 591-2121.

Thank you for your help

Sincerely,

Matthias Hoffmann-Kuhnt
Dear Mr. Herman:

Well Construction / Pump Installation Permit Application for Well No. 1751-08

We have received your well construction / pump installation permit application and filing fee for the Kewalo Basin Well (Well No. 1751-08). However, your application is incomplete. Matters which must be addressed before we accept your application as complete are as follows:

1. Please complete line item 7 of your application by indicating any pending actions:

   - CDUA
   - SMA
   - EIS
   - EA
   - EXNONE
   - Other (Explain)

   (CDUA = Conservation District Use Application; SMA = Special Management Area; EIS = Environmental Impact Statement; EA = Environmental Assessment)

2. Please complete line item 9 of our updated application (version dated 4/7/99) by answering the following question:

   THE LANDOWNER CERTIFIES THAT THE SUBJECT PROPERTY, OR A PORTION THEREOF, WAS ☐ OR WAS NOT ☑ A STATE OF HAWAII LAND PATENT GRANT ISSUED AFTER 1960. (Please check with your title search company or the Land Division, Department of Land and Natural Resources at 587-0414 for help.)

As was discussed with Mr. Matthias Hoffman-Kuhnt during a May 3, 1999 telephone conversation, the Hawaii Well Construction & Pump Installation Standards (January 23, 1997) require that a water use permit be obtained prior to well construction permit approval in designated water management areas unless the applicant declares the well exploratory and foregoes the expectation of withdrawing water from the source until some later date. Since your proposed well is located within the boundaries of the Nuuanu Aquifer System, which has been designated a water management area, and we understand you do not want to declare it exploratory, you must apply for a water use permit also. As such, please complete and return the attached application for a water use permit. Per Mr. Hoffman-Kuhnt’s request, we are also enclosing a copy of our Administrative Rules regarding the processing of water use permits. We will defer administrative action on your well construction / pump installation permit application until a water use permit application has been made and approved.

If you have any questions about your permit application, please contact Lenore Nakama of the Commission staff at 587-0218.

Sincerely,

EDWIN T. SAKODA
Acting Deputy Director

Enclosure

c: Jan S. Yokota, Hawaii Community Development Authority
Mr. Louis M. Herman
Kewalo Basin Marine Mammal Lab
1129 Ala Moana Blvd.
Honolulu, HI 96814

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Sincerely,

EDWIN T. SAKODA
Acting Deputy Director

Enclosure

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<tr>
<th>F YR</th>
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REMARKS:
- LINE (1) Well No. 3926-01 (WCPA/PIPA)
- LINE (2) Well No. 1751_08 (WCPA/PIPA)
- LINE (3)                                     
- LINE (4)                                     

---

EARTHWATCH PETTY CASH
1129 ALA MOANA BLVD. 591-2121
HONOLULU, HI 96814

PAY TO THE ORDER OF DEPT OF LAND AND NATURAL RESOURCES $25.00

American Savings Bank
ANTHEM COMPANY
1351 KAPUAIWA BOULEVARD
HONOLULU, HAWAII

FOR WELL PERMIT APPLICATION

DATE 4-26-99

1714

59-7076/3213

1231370765

56!034738

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

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225.

1. APPLICANT: (Fill out all three, if applicable, and place a check next to the primary contact)
   - WELL OWNER: Louis M. Herman
   - Contact Person: Louis M. Herman
   - Phone: 591-2121
   - Mailing Address: 1129 Ala Moana Blvd., Honolulu, HI 96814
   - Fax: (808)-597-8572
   - LAND OWNER: HCDA
   - Contact Person: Jan S. Yokota
   - Phone: 587-2870
   - Mailing Address: 677 Ala Moana Blvd., Suite 1001, Honolulu, HI 96813
   - Fax: (808)-599-2613
   - CONTRACTOR: Roscoe Moss Hawaii
   - Contact Person: Tracy Runnels
   - Phone: 682-5856
   - Mailing Address: 91-259A Olai St., Kapolei, HI 96707
   - Fax: 682-5866

2. WELL LOCATION/NAME: Kewalo Basin
   - Island: Oahu
   - Address_________________________ Tax Map Key: 2-1-58-60
   - Attach the relevant portion of (a) a 7.5-Minute Series USGS topographic map (scale 1"=24,000), and (b) a property tax map, showing well location referenced to established property boundaries.

3. (a) PROPOSED WORK: (Check all that apply)
   - Drill New Well
   - Modify Existing Well
   - Abandon/Seal
   - Redrill
   - Modify Pump
   - Replace Pump
   - * Be sure to complete and submit well abandonment report upon completion of work.
   - (b) WELL TYPE:
     - Dug
     - Bored
     - Driven
     - Radial
     - Is this well a part of a battery of wells? Yes ☐ No ☐
     - (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   - Rated Pump Capacity: 1000GPM
   - If Pump replacement, Existing Pump Capacity: ____________________________ gallons per minute
   - Pump Type (Check one):
     - Deep Well Turbine
     - Rotary
     - Submersible
     - Rotory-Displacement
     - Propeller
     - Reciprocating
     - Centrifugal
     - Rotary-Gear
     - Impulse
     - Drilled
     - Electric, rated horsepower: 15

5. PROPOSED USE: (Check all that apply)
   - Municipal (including hotels, stores, etc.)
   - Domestic (individual, noncommercial water system)
   - Irrigation (crop)
   - Military
   - Industrial
   - No. of Dwelling Units:__________________________ No. of Acres:__________________________
   - No. of Other: Marine Research ☐

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 1,440,000 gallons per day SAQ-T
   - (b) METHOD OF FLOW MEASUREMENT:

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

8. 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 contractor shall submit to the Commission a well completion/abandonment report within 30 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

UNIVERSITY OF HAWAII
Well Owner Name Louis M. Herman
Landowner Name Jan S. Yokota
Contractor Name Roscoe Moss Hawaii

Signature Louis M. Herman
Date 3/30/99
Signature Jan S. Yokota
Date 4/7/99
Signature Tracy Runnels
Date 4/7/99

Field Checked By ___________________________ Longitude ____________ Aquifer System Name: Moomau 30102
Date ___________________________ Latitude ____________ State Well No. 1151-08

WCPIFORM (11/13/98)

* amended per Matthias Hoffmann - Kubert 5-3-99 (W)
For non-salt water Basal Wells - bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = \( \frac{1}{4} \times \text{Water Level Elevation} \)

Example: Estimated + 2 ft. Water Level Elev. \( \rightarrow \) Bottom Elevation of Well Limit = \( \left( \frac{2}{4} \times 18.5 \right) = 18.5 \) ft.

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

**Impermeable Casing Material:**
- 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

*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

*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

**Permeable Casing Material:**
- 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

*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

*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
NOTE: All lots owned by State of Hawaii and under the control and management of the Dept. of Transportation, Harbors Division unless otherwise noted.

NOTICE: Owner's, lessee's and vendee's names recorded on this tax map print may not be current.

FOR REAL PROPERTY TAXATION PURPOSES SUBJECT TO CHANGE

DEPARTMENT OF TAXATION
TAXATION MAPS BUREAU
STATE OF HAWAII

TAX MAP

<table>
<thead>
<tr>
<th>FIRST TAXATION DIVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZONE</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

SCALE: 1 IN. = 100 FT.
WCR 2 Check for Well No. 1751-08

1. **Pump Tests Check (special condition of PIP? Yes/No)**
   - Glenn Bauer (initial if yes)
   - Yes No If no, describe deficiency
     - Step-Drawdown Test:
       - followed WCPI Stds
       - analysis attached
       - proposed pump cap o.k.
     - Aquifer Pump Test:
       - followed WCPI Stds
       - T & S analysis attached
     - Well Interference:
       - estimated Steady-State drawdown at 1-mile radius is ft.
       - analysis attached
     - Stream Surface Water Impacted:
       - If yes, identify most probable stream

2. **Pump Installation Check**
   - Mitch Ohye (initial)
   - Yes No If no, describe deficiency
     - data complete
     - followed WCPI Stds
     - well database updated

3. Charley/Lenore/Ryan (initial) take action based on above analysis
4. Roy (initial) check
5. Susan Subia (initial) finalize
6. Linnel (initial) signature
7. Charley/Lenore/Ryan File
Dear Dr. Herman:

Well Completion Report for Well No. 1751-08

We received your Well Completion Report Part II for the Kewalo Basin (Well No. 1751-08) on September 25, 2001 and acknowledge that it is complete. Thank you for also returning a signed copy of the permit. This completes the regulatory requirements of the well construction and pump installation permits for Well No. 1751-08.

If you have any questions, please contact Lenore Nakama of the Commission staff at 587-0218.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LN:ky
c. William Moore, Beylik Drilling
1. State Well No.: 1751-08  
2. Address: Kewalo Basin  
4. Date Pump Installed: 8-3-01  
5. PERMANENT PUMP INFORMATION  
   - Pump Type, Make, Serial No.: Goulds Submersible 23661 74025  
   - Rated Capacity: 1000 gpm at head of: 60 ft  
   - Motor Type, H.P., Voltage, rpm: Franklin, 40 HP, 460V, 3450 RPM  
6. Type of flow meter: [ ] Centrifugal [ ] Submersible [ ] Deep Well Turbine [ ] Rotary-Gear [ ] Rotary-Displacement  
   - Method of flow measurement: [ ] Flowmeter [ ] Weir [ ] Open Pipe [ ] Orifice  
   - Size: [ ] Make: [ ]  
   - Other*: [ ], explain below  
   - [ ] Impulse  
7. Fill in the as-built section on the other side of this sheet.  
8. Other remarks/comments: The well is installed in a flush mount locking vault approximately 6 inches below grade.  

Pump Installation Contractor (print) Beylik Drilling, Inc. C-57/C-57a/A Lic. No. AC-21896  
Signature: 

Permittee (print)  
Signature:  

Date: 9-24-01
Bench mark elevation surveyed to nearest 0.01 ft. = NA ft. mean sea level

Identify reference point elevation for water level measurements through chase tube = NA ft. mean sea level

Describe reference point:

Pump intake depth = 43 ft. (referenced to bench mark)

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

If airline installed, bottom of airline elevation = NA ft. mean sea level
PUMP INSTALLATION PERM.
Kewalo Basin, Well No. 1751-08

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 Kewalo Basin (Well No. 1751-08) at Kewalo Basin, Oahu, TMK 2-1-538:60, 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 1000 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on 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 by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

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

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

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. The 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 (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 31, 2001
Expiration Date: August 31, 2003

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

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

Permittee's Signature: [Signature]
Date: 9-24-01

Printed Name: Louis Herman
Firm or Title: Kewalo Basin Marine Animal Lab

Installer's Signature: [Signature]
Date: 9-24-01

Printed Name: William C. Moore, VP
Firm or Title: Beylik Drilling, Inc.

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
  Honolulu Board of Water Supply
  Jan S. Yokota, HCOA
Dr. Louis M. Herman  
Kewalo Basin Marine Mammal Lab  
1129 Ala Moana Blvd.  
Honolulu, HI 96814  

Dear Dr. Herman:  

Pump Installation Permit  
Kewalo Basin (Well No. 1751-08)  

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

Special Conditions  

1. (NONE)  

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

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

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

Finally, this letter is notice that we have accepted your Well Completion Report - Part I as complete as of August 31, 2001.  

If you have any questions, please call Lenore Nakama of the Commission staff at 587-0218.  

Aloha,  

[Signature]  
GILBERT S. COLOMA-AGARAN  
Chairperson  

Enclosure  
C: Jan S. Yokota, HCDA
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 Kewalo Basin (Well No. 1751-08) at Kewalo Basin, Oahu, TMK 2-1-58:60, 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 §13-168-16, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 1000 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on 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. The 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 31, 2001
Expiration Date: August 31, 2003

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

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

Permittee's Signature: ___________________________ Date: __________

Printed Name: ___________________________ Firm or Title: ___________________________

Installer's Signature: ___________________________ C-57, C-57a, or A License #: __________ Date: __________

Printed Name: ___________________________ Firm or Title: ___________________________

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

Attachments

USGS
Department of Health/Safe Drinking Water & Wastewater Branch
Honolulu Board of Water Supply
Jan S. Yokota, HCDA
August 31, 2001

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

Subject: Kewalo Basin Transfer Allocation Request

Dear Ms. Nakama:

Attached please find a copy of the Well Construction Report for State Well No. 1751-08 at the Kewalo Basin Marine Mammal Lab. Please note, at this time we would like to request a transfer in allocation of water usage from State Well No. 1751-05 to State Well No. 1751-08. Should you have any questions or require any further information please do not hesitate to call me.

Sincerely,

[Signature]

Robert A. Glaesott  
Project Manager

rag:If
Attachment

C: Dr. Herman, Kewalo Basin Marine Mammal Laboratory
# WELL COMPLETION REPORT

## Part I. Well Construction & Part II. Permanent Pump Installation

**Instructions:** Please print or type and submit completed report within 60 days after well completion to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. An as-built drawing of the well and chemical analysis should also be submitted. For assistance call the Commission Regulation Branch at 587-0225, or 1-800-469-4644 Extension 70225.

### 1. State Well No.: 1751-68    Well Name: Kewalo Basin    Island: Oahu
### 2. Location/Address: Kewalo Basin, Oahu    Tax Map Key: 2-1-68-60

## PART I. WELL CONSTRUCTION REPORT

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Name of driller who performed work:</td>
<td>John Carroll</td>
</tr>
<tr>
<td>5. Type of rig/construction:</td>
<td>Bucket Auger Rig</td>
</tr>
<tr>
<td>6. Date(s) Well Construction and pump tests (if any) completed:</td>
<td>7-25-01</td>
</tr>
<tr>
<td>7. GROUND ELEVATION (referenced to mean sea level, msl):</td>
<td>NA ft.</td>
</tr>
<tr>
<td>8. DRILLER'S LOG: Please attach geologic log (if available or if required by permit)</td>
<td></td>
</tr>
<tr>
<td>Depths (ft.)</td>
<td>Rock Description, Water Level, Dates, etc.</td>
</tr>
<tr>
<td>0 to 101</td>
<td>Poorly consolidated Coraline Limestone</td>
</tr>
<tr>
<td>101 to</td>
<td>DTW = 6 ft, 7-24-01</td>
</tr>
<tr>
<td></td>
<td>(If more space is needed, continue on back)</td>
</tr>
<tr>
<td>9. Total depth of well below ground:</td>
<td>101 ft.</td>
</tr>
<tr>
<td>10. Hole size:</td>
<td>30 inch dia. from 0 ft. to 25 ft. below ground</td>
</tr>
<tr>
<td></td>
<td>24 inch dia. from 25 ft. to 101 ft. below ground</td>
</tr>
<tr>
<td>11. Casing installed:</td>
<td>14 in. I.D. x 3/8 in. wall solid section to 60 ft. below ground</td>
</tr>
<tr>
<td></td>
<td>14 in. I.D. x 3/8 in. wall perforated section to 100 ft. below ground</td>
</tr>
<tr>
<td>12. Annulus:</td>
<td>Grouted from 2 ft. below ground to 8 ft. below ground</td>
</tr>
<tr>
<td></td>
<td>Gravel packed from 8 ft. below ground to 101 ft. below ground</td>
</tr>
<tr>
<td>13. Initial water level:</td>
<td>6 ft. below ground</td>
</tr>
<tr>
<td>14. Initial chloride:</td>
<td>NA ppm</td>
</tr>
<tr>
<td>15. Initial temperature:</td>
<td>NA °F</td>
</tr>
<tr>
<td>16. PUMPING TESTS: Reference Point (R.P.) used:</td>
<td>NA which elevation is</td>
</tr>
<tr>
<td>(1) Step-Drawdown Test Date</td>
<td>NA</td>
</tr>
<tr>
<td>(2) Long-term Aquifer Test Date</td>
<td>NA</td>
</tr>
<tr>
<td>Start water level</td>
<td>ft. below R.P.</td>
</tr>
<tr>
<td>End water level</td>
<td>ft. below R.P.</td>
</tr>
<tr>
<td>Start water level</td>
<td>ft. below R.P.</td>
</tr>
<tr>
<td>End water level</td>
<td>ft. below R.P.</td>
</tr>
<tr>
<td>17. Pump Test Procedures data &amp; graphs (12/17/87 SDPTD &amp; CRPTD Forms) attached?</td>
<td>Yes No</td>
</tr>
<tr>
<td>18. As-built drawings attached?</td>
<td>Yes No</td>
</tr>
<tr>
<td>19. Other remarks/comments:</td>
<td>(On back of this form)</td>
</tr>
</tbody>
</table>

---

**Well Drilling Contractor (print) :** Beylik Drilling, Inc.  C-57 Lic. No. AC-21896

**Signature:** [Signature]

**Date:** 8-31-01

**Surveyor (print):**

**License No.:**

**Date:**

**Applicant (print):** Kewalo Basin, Inc. - Pump Lab - Lewis M. Herman

**Signature:** [Signature]

**Date:** 6/27/01
Well Completion Diagram
Beylik Drilling
Job No.: 9340G
Client: Kewalo Basin Marine Mammal Research Laboratory
Job Location: Kewalo Basin
Date Well Constructed: 7/25/01
Remarks: Note the surface completion is flush mount enclosed in a locking traffic rated vault.

Annular Seal, material 1:1 sand slurry
Depth to water 6'

Well Casing, diameter and material 14” Schedule 80 PVC

Size of Gravel Used 3/4” from 101’ to 56’ and 3/8” from 56’ to 10’

Screen diameter, slot size, and material 14” Schedule 80 PVC with 1/4” slots

Diameter of borehole 30”
Depth of temporary conductor casing (removed after the well was constructed) 25’
Top of Gravel Pack 10’
Diameter of borehole 24”
Top of screen 60’
Bottom of screen 100’
Total Depth 101’

NOTE: NOT TO SCALE
EXPLORATORY WELL CONSTRUCTION PERMIT
Kewalo Basin Well, Well No. 1751-08

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 Kewalo Basin Well (Well No. 1751-08) at Kewalo Basin, Oahu, TMK 2-1-58:H, subject to the Hawaii Well Construction & Pump Installation Standards (123/297) 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 §13-165-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 11/4-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 pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

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

4. The permittee, 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 correlational 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, 1997; HWCPIS). If the HWCPIS 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 (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 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 5, 2000
Expiration Date: April 5, 2002

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: 6/27/01
Printed Name: Firm or Title: Kewalo Basin, Water Management Lab
Driller's Signature: C-57 License #: 20718 Date: 6/27/01
Printed Name: Firm or Title: Driller Inc.

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

Attachment
C: USGS
Department of Health/ Safe Drinking Water, Wastewater, and Clean Water Branches
Honolulu Board of Water Supply
Jan S. Yokota, HCDA

* 7/101 called Bob MacArthur, correct # is 21896, UN
FACSIMILE TRANSMITTAL

To: Joel Narusawa
Company: UH
Fax Number: 956-3205
Phone Number: 956 - 9173

From: Ed Sakoda
Date: May 9, 2001
Pages Including Header: 3
Subject: Well Permit

Notes/Comments:
Ref: CWRM-SS

Mr. Matthias Hoffman-Kuhnt
Kewalo Basin Marine Mammal Laboratory
1129 Ala Moana Blvd.
Honolulu, Hawaii 96814

Dear Hoffman-Kuhnt:

Exploratory Well Construction Permit
Kewalo Basin Well (Well No. 1751-08)

Enclosed are two (2) copies of your approved Exploratory 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. Standard Condition 2 is modified to exempt the permittee from the requirements to install a monitoring tube and conduct pumping tests.
2. Standard Conditions 7.b. and 7.e. are waived.
3. The permittee is hereby informed, and agrees as a condition of this permit, that the issuance of the exploratory drilling permit shall in no way prejudice any future consideration by the Commission on the issuance or non-issuance of a water use permit.
4. The pump installation permit application for Well No. 1751-08 will be cancelled if a water use permit application is not received before the well construction is completed.

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.

Please sign and have the contractor sign both permit originals and return one for our files.

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 the Commission staff at 587-0218.

Aloha,

TIMOTHY E. JOHNS
Chairperson

Enclosures
EXPLORATORY WELL CONSTRUCTION PERMIT
Kewalo Basin Well, Well No. 1751-08

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 Kewalo Basin Well (Well No. 1751-08) at Kewalo Basin, Oahu, TMK 2-1-58:60, 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 basin ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basin ground water unless otherwise authorized by the Chairperson.

4. The permittee, 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 of 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.
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   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, 1997; HWCPIS). If the HWCPIS 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 (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 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 5, 2000
Expiration Date: April 5, 2002

TIMOTHY E. JOHNS, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the 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/ Safe Drinking Water, Wastewater, and Clean Water Branches Honolulu Board of Water Supply Jan S. Yokota, HCDA
WeNo.

WeU

Name
Applicant
1751-08
Kewalo Basin
Kewalo Basin

SECTION 1: WELL LOCATION INFORMATION

Island
Aquifer System
Aquifer Sector
OAHU
HONOLULU
NUUANU

Proposed Use
Proposed Withdrawal
System Sustainable Yield

SECTION 2: WELL SECTION DATA
(enter data in grey cells only)

Elevation at top of casing
Ground Elevation
Cement Grout
Rock Packing
Hole Diameter
Total Depth

Solid Casing
Material
Designation
Length
Diameter
Wall Thickness

Casing
Material
Designation
Length
Diameter
Wall Thickness
Openings

Open Hole
Length
Diameter

SECTION 3: CHECKLIST
(values to check are shaded)

Well Depth
Theoretical Thickness of Aquifer
1/4 Aquifer Thickness

Depth of Well below Sea Level
49.5 ft. too deep (refer to HWCPIS Section 2.2)

Well Casing
Minimum Wall Thickness
Material
County or Non-County
PVC
don-county

Minimum Thickness per standards
0.687 in.

Wall Thickness Provided
0.750 in. okay (refer to HWCPIS Section 2.4 c)

Minimum Length of Solid Casing
90% of ground to top of aquifer
9.18 ft.

Length of solid casing Provided
10 ft. okay (refer to HWCPIS Section 2.4 d)

Casing Material
Sch 80 okay (refer to HWCPIS Section 2.4 e)

Annular Space
If the cell above reads #N/A, reference HWCPIS

Depth of Grouting
Calculated Depth of Grouting
7.14 ft.

Depth of Grouting provided
10 ft. okay (refer to HWCPIS Section 2.6 c)

Thickness of Annular Space
5 in. okay (refer to HWCPIS Section 2.6 d)
TO: Honorable Bruce S. Anderson, Director  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch

FROM: Timothy E. Johns, Chairperson  
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application  
Kewalo Basin Well (Well No. 1751-08)

Transmitted for your review and comment is a copy of the captioned well application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 10, 2000.

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 Lenore Nakama of the Commission staff at 587-0218.

Attachment(s)

RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

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

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

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

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

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

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

No comments/objections

Contact Person: Leni N. Kajiwara  
Phone: 587-4294

Signed: Leni N. Kajiwara  
Date: 4-3-2000
TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch

FROM: Timothy E. Johns, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application
Kewalo Basin Well (Well No. 1751-08)

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Attachment(s)

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This well qualifies as a source which will serve as a source of potable water to a public water system (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 the 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.

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

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

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

No comments/objections

Contact Person: William Wong
Phone: 586-4258

Signed: William Wong
Date: MAR 31 2000
The Department of Health, Clean Water Branch has the following comments:

1. For Well-Drilling Activities

Any discharge to State waters of treated process wastewater effluent associated with well drilling activities is regulated by Hawaii Administrative Rules, Title 11, Chapter 55, Appendix I, effective September 22, 1997. Treated process wastewater effluent covered by this general permit includes well drilling slurries, lubricating fluids wastewaters, and well purge wastewaters. This general permit does not cover well pump testing. The applicable Notice of Intent Forms and filing fee shall be submitted at least thirty (30) days before the start of discharge to the Department of Health, Clean Water Branch at 919 Ala Moana Boulevard, Room 301, Honolulu, Hawaii 96814-4920 or P.O. Box 3378, Honolulu, Hawaii 96801-3378. Inquiries may be directed to the Clean Water Branch at (808) 586-4309 or by fax at (808) 586-4352.

2. For Well Pump Testing

The discharger shall take all measures necessary to prevent the discharge of pollutants from entering State waters. Such measures shall include, if necessary, containment of the initial discharge until the discharge is essentially free of pollutants. If the discharge is entering a stream or river bed, best management practices shall be implemented to prevent the discharge from disturbing the clarity of the receiving water. If the discharge is entering a storm drain, the discharger must obtain written permission from the owner of that storm drain prior to discharge. Furthermore, best management practices shall be implemented to prevent the discharge from collecting sediments and other pollutants prior to entering the storm drain.

JS/cr
TO: Dean Y. Uchida, Administrator  
Land Division
FROM: Linnel T. Nishioka, Deputy Director  
Commission on Water Resource Management
SUBJECT: Well Construction/Pump Installation Permit Application  
Kewalo Basin Well (Well No. 1751-08)

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

We would appreciate your comments on the captioned with regard to the programs, plans, and objectives specific to your division. Specifically, Item 9 on the application has been added per your request concerning water lease/permits administered by your division. Please respond by returning this cover memo form by April 10, 2000.

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 Lenore Nakama of the Commission staff at 587-0218.

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

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

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

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

No objections

Other comments: State land under the operation of Executive Order No. 2644 to DOT, Harbors Div. Acquired by the Territory of Hawaii from Victoria Ward in 1910.

Contact Person Gary Martin  
Phone: 587-0421

Signed: Gary Martin  
Date: MAR 3 1 2000
Mr. Matthias Hoffmann-Kuhnt
Kewalo Basin Marine Mammal Laboratory
1129 Ala Moana Blvd.
Honolulu, HI 96814

Dear Mr. Hoffmann-Kuhnt:

Well Construction / Pump Installation Permit Application for Well No. 1751-08

We acknowledge receipt, on March 15, 2000, of your completed well construction / pump installation permit application for the Kewalo Basin Well (Well No. 1751-08). 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.

As discussed during your March 15, 2000 telephone conversation with a member of my staff, approval of a water use permit is required prior to, or concurrent with, approval of your pump installation permit. A copy of our water use permit application form and our administrative rules for processing the application has been sent to you in a separate packet.

If you have any questions about your permit application, please contact Lenore Nakama of the Commission staff at 587-0218.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

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

FROM: Timothy E. Johns, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application
Kewalo Basin Well (Well No. 1751-08)

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Attachment(s)

RESPONSE:

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[ ] 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).

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

[ ] No comments/objections

Contact Person ___________________________ Phone: ___________________________

Signed: ___________________________ Date: ___________________________
TO: Dean Y. Uchida, Administrator
   Land Division
FROM: Linnel T. Nishioka, Deputy Director
   Commission on Water Resource Management
SUBJECT: Well Construction/Pump Installation Permit Application
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We would appreciate your comments on the captioned with regard to the programs,
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about this permit application, request additional information, or request additional review time,
please contact Lenore Nakama of the Commission staff at 587-0218.

LN: ss
Attachment(s)
RESPONSE:
[ ] A water lease/permit is required of this applicant and an application for such will be requested by our
division.
[ ] A water lease/permit is not required of this applicant.
[ ] A water lease/permit has been obtained by the applicant through lease no. ____________________.
[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.
[ ] No objections
[ ] Other comments:

Contact Person ___________________________________________ Phone: ______________________

Signed: ___________________________________________ Date: ____________________
University of Hawai'i at Manoa
Kewalo Basin Marine Mammal Laboratory
1129 Ala Moana Blvd. • Honolulu, Hawaii 96814
Telephone: (808) 591-2121 • Fax: (808) 597-8572

FACSIMILE TRANSMITTAL SHEET

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<th>TO:</th>
<th>FROM:</th>
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<td>Lenore Nakama</td>
<td>Matthias Hoffmann-Kuhnt</td>
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☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Lenore,

Attached please find the completed items of our well application. If you have any other questions please contact me @ 591-2121.

Thank you for your help

Matthias Hoffmann-Kuhnt
Mr. Louis M. Herman
Kewalo Basin Marine Mammal Lab
1129 Ala Moana Blvd.
Honolulu, HI 96814

Dear Mr. Herman:

Well Construction / Pump Installation Permit Application for Well No. 1751-08

We have received your well construction / pump installation permit application and filing fee for the Kewalo Basin Well (Well No. 1751-08). However, your application is incomplete. Matters which must be addressed before we accept your application as complete are as follows:

1. Please complete line item 7 of your application by indicating any pending actions:

☐CDUA  ☐ SMA  ☐ EIS  ☐ EA  ☑NONE  ☐ Other (Explain)

(CDUA=Conservation District Use Application; SMA=Special Management Area; EIS=Environmental Impact Statement; EA=Environmental Assessment)

2. Please complete line item 9 of our updated application (version dated 4/7/99) by answering the following question:

THE LANDOWNER CERTIFIES THAT THE SUBJECT PROPERTY, OR A PORTION THEREOF, WAS ☐ OR WAS NOT ☑ A STATE OF HAWAII LAND PATENT GRANT ISSUED AFTER 1960. (Please check with your title search company or the Land Division, Department of Land and Natural Resources at 587-0414 for help.)

As was discussed with Mr. Matthias Hoffman-Kuht during a May 3, 1999 telephone conversation, the Hawaii Well Construction & Pump Installation Standards (January 23, 1997) require that a water use permit be obtained prior to well construction permit approval in designated water management areas unless the applicant declares the well exploratory and forges the expectation of withdrawing water from the source until some later date. Since your proposed well is located within the boundaries of the Nuuanu Aquifer System, which has been designated a water management area, and we understand you do not want to declare it exploratory, you must apply for a water use permit also. As such, please complete and return the attached application for a water use permit. Per Mr. Hoffman-Kuht's request, we are also enclosing a copy of our Administrative Rules regarding the processing of water use permits. We will defer administrative action on your well construction / pump installation permit application until a water use permit application has been made and approved.

If you have any questions about your permit application, please contact Lenore Nakama of the Commission staff at 587-0218.

Sincerely,

[Signature]
EDWIN T. SAKODA
Acting Deputy Director

LN:as
Enclosure

c: Jan S. Yokota, Hawaii Community Development Authority
Mr. Louis M. Herman  
Kewalo Basin Marine Mammal Lab  
1129 Ala Moana Blvd.  
Honolulu, HI 96814

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REMARKS: LINE (1) Well No. 3926-01 (WCPA/PIPA)
LINE (2) Well No. 1751_08 (WCPA/PIPA)
LINE (3) 
LINE (4) 

EARTHWATCH PETTY CASH
1129 ALA MOANA BLVD. 591-2121
HONOLULU, HI 96814

PAY TO THE ORDER OF DEPT OF LAND AND NATURAL RESOURCES $ 25.00

American Savings Bank
Anchorage, Alaska

FOR WELL PERMIT APPLICATION 00:32:13:70:07:65:5

DATE 4-26-99

1714
1. APPLICANT: (Fill out all three, if applicable, and place a check next to the primary contact)

☐ OWNERS: Louis M. Herman
Kewalo Basin Marine Mammal Lab
Mailing Address: 1129 Ala Moana Blvd., Honolulu, HI 96814
Fax: (808)-597-8872
☐ CONTACT PERSON: Louis M. Herman
Phone: 591-2121

☐ LANDOWNERS: HCDA
Jan S. Yokota
Mailing Address: 677 Ala Moana Blvd., Suite 1001, Honolulu, HI 96813
Fax: (808)-599-2613
E-mail: HCDA@GTE.NET

☐ CONTRACTOR: Roscoe Moss Hawaii
Tracy Runnells
Mailing Address: 91-259A Olai St., Kapolei, HI 96707
Fax: 682-5856
E-mail: TRACY@HAWAII.COM

2. WELL LOCATION/NAME: Kewalo Basin
Address: 1129 Ala Moana Blvd., Honolulu, HI 96814
Island: Oahu
Tax Map Key: 2-1-58:60

3. (a) PROPOSED WORK: 
☐ Drill New Well 
☐ Deepen 
☐ Install New Pump 
☐ Modify Existing Well 
☐ Redrill 
☐ Modify Pump 
☐ Abandon/Seal * 
☐ Replace Pump 

* Be sure to complete and submit well abandonment report upon completion of work.

(b) WELL TYPE: 
☐ Dug 
☐ Bored 
☐ Driven 
☐ Drilled 
☐ Radial 

Is this well a part of a battery of wells? ☐ Yes ☐ No

4. PROPOSED PUMP INFORMATION: 
Rated Pump Capacity: 1000GPM gallons per minute

☐ Deep Well Turbine 
☐ Rotary 
☐ Propeller 
☐ Diesel 
☐ Gas 
☐ Submersible 
☐ Rotary-Displacement 
☐ Reciprocating 
☐ Impulse 
☐ Electric, rated horsepower: 15

If Pump replacement, Existing Pump Capacity: 

5. PROPOSED USE: 
☐ Municipal (including hotels, stores, etc.) 
☐ Commercial 
☐ Domestic (individual, noncommercial water system) 
☐ Other: Marine Research

☐ Industrial 
☐ Irrigation (crop) 
☐ No. of Dwelling Units: 
☐ No. of Acres:
☐ Military

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 1,440,000 gallons per day SAQ-T

(b) METHOD OF FLOW MEASUREMENT:

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

8. REMARKS, EXPLANATIONS:

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

UNIVERSITY OF HAWAII
Well Owner: Louis M. Herman
Signature: [Signature]
Date: [Date]

HCDA
Landowner: Jan S. Yokota
Signature: [Signature]
Date: [Date]

ROSCEO MOSS HAWAII
Contractor: Tracy Runnells
Signature: [Signature]
Date: [Date]

Field Checked By: [Signature]
Date: [Date]

Longitude: [Longitude]
State Well No.: [State Well No.]

(If space needed, please attach additional sheet)

Amended by Matthias Hoffmann -Kubish 5-3-99 LW
9. PROPOSED WELL SECTION

Hole Diameter: 24 in.
Minimum of 2' Radius & 4" Thick Concrete Pad

Ground Elevation: 10.2 ft., msl*

Elevation at top of casing 10.5 ft., msl*
(Survey to nearest 0.01 ft.)

Minimum annular space between hole and casing ≥ 3"

Cement Grade: 10 ft. (min. 70% of distance from ground elevation to top of water surface or 500 ft., whichever is less.)

Total Depth: 60 ft.

Minimum annular space between hole and casing ≥ 3"

Rock or Gravel Packing: 50 ft.

Material: □ Crushed Basalt  □ Round Gravel

Water Level Elevation: 0 ft., msl*

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,
Bottom Elevation of Well Limit = (Water Elevation - 41 x Water Level Elevation) / 4
Example: Estimated + 2 ft. Water Level Elev. ➔ Bottom Elevation of Well Limit = (2 - 41 x 2) / 4 = -18.5 ft.

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

Impermeable Casing Material:

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  □ ASTM A312

ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one)
□ Schedule 40  □ Schedule 80

PVC Plastic conforming to ASTM F480 and (ASTM D1765 or ASTM D2241): (check one)
□ Schedule 40  □ Schedule 80

Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM 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

Permeable Casing Material:

Steel: compliant with (check one or more):
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Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to assure that your construction plans are in compliance with all existing regulations.

Solid Casing: (≥ 90% of (Ground Elev.-Water Level Elev.))
Material: PVC
Material Standard: ASTM F480
Length: 10 ft.
Diameter: 14 in.
Wall Thickness: .750 in.
Bottom Elevation: -50 ft., msl*

Open Casing: □ Perforated  □ Screen
Material: PVC
Material Standard: ASTM F480
Length: 50 ft.
Diameter: 14 in.
Wall Thickness: .750 in.
Openings: □ 60 sq. in./L.F.
Bottom Elevation: -50 ft., msl*

Open Hole:
Length: NA
Diameter: 14 in.
Bottom Elevation: NA ft., msl*