### PUBLIC RECORD DATA

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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed.
Hi Charley,

Ok, here's your update.  
4720-01 Siele, Jack -- CANCELLED ✓
5419-04 Going-- CANCELLED ✓
5513-02 Bryce - I'm putting all that together for you.
5615-03 Trier - I need to get a copy of the WCP from you please. ✓ (awaiting return signed)
5616-02 Martin - I need to get a copy of the WCP from you please.
5839-04 Maile Pai - I'm waiting to hear back from the contact person.

4926-02 HI Cement- Let me know what I need to do to figure this one out as I still am under the impression that they are working on everything. That is unless you have talked to Dave Gomes in the last few weeks, since that would be the last time I spoke with him. ✓ (awaiting return signed)
5631-09 Waihe Deep Monitor Well - Can I please get a copy of the WCP, I can't find one in the massive file. ✓

Thank you,
Leah

This will go back a ways!
Wells 5615-03 (Trier) and 5616-02 (Martin) never had signed WCPs. Do you have them in your files? (we got the signed PIPs)
The Waihe Deep Monitor Well doesn't yet have a signed WCP -- you may hear from ur Engineering Branch to send that in ASAP.

Other wells have expired. We'll send notices unless you can tell us otherwise:

  5419-04 (Goings)
  5513-02 (Bryce)
  5839-04 (Maile Pai)

We have no paperwork on the pump work for Jack Siele's well (4720-01). Was it done?
We're finally going to cancel the Hawaiian Cement well permits.

Charley Ice  
Hydrologist  
Hawaii Water Commission  
1151 Punchbowl 227 Kalanihoku  
P.O. Box 621, Honolulu 96809  
(808) 587-0218
April 8, 2009

Mr. Michael Robertson
Wailani Drilling, Inc.
P.O.Box 523
Puunene HI 96784

Dear Mr. Robertson:

Extension of Pump Installation Permit
Puunene-Hawaiian Cement Well (Well No. 4926-02)

Please note that your pump installation permit for the captioned well was to expire November 20, 2008. Prior to that, however, in view of the requirement to obtain a water license for this use of State land, the permit was suspended on April 29, 2008.

We now understand that the water license requirement necessitated completion and acceptance of an environmental impact statement (EIS) for the project, and that a move for acceptance is proceeding to the Land Board in the foreseeable future, and that you are seeking a date for its scheduled hearing.

Therefore, by this letter we are holding open the suspended permit, contingent upon acceptance of the EIS. Upon your notification and documentation to us that this step is complete, we will grant an extension to your permit for a time you specify as necessary to schedule and complete the work.

If you have any questions, please contact Charley Ice of our staff at (808) 587-0218, or toll free from Maui at 984-2400 x 70218.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

CI:ss

c: Hawaiian Cement
   Land Division
   Munekiyo & Hiraga
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PFP suspended due to water license issue - status?
DFF seen status?
see tabs
Mr. Michael Munekiyo, AICP  
Munekiyo & Hiraga  
305 High Street, Suite 104  
Wailuku, HI 96793  

Dear Mr. Munekiyo:  

SUBJECT: Puunene Hawaiian Cement Production Well Draft EA  
FILE NO.: N/A  
TMK NO.: 3-8-008.031  

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore, all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at http://www.hawaii.gov/dlnr/cwrn.  

Our comments related to water resources are checked off below.  

☐ 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.  

☐ 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.  

☐ 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.  

☒ 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed. A listing of fixtures certified by the EPA as having high water efficiency can be found at http://www.epa.gov/watersense/pp/index.htm.
5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://hawaii.gov/dbedt/czrninitiativenid.php.

6. We recommend the use of alternative water sources, wherever practicable.

7. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM:
Additional information and forms are available at www.hawaii.gov/dlnr/cwm/forms.htm.

8. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water.

9. A Well Construction Permit(s) is (are) required before the commencement of any well construction work.

10. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.

11. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

12. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.

13. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.

14. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.

15. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.

16. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

OTHER:

Well Construction has been duly permitted and completed. The original application requested 216,000 gpd using a 300 gpm pump, but the well was tested at only 250 gpm. The current document notes a demand for 70,000 gpd.

Earlier application for this well elicited a requirement for obtaining a water license from the Board of Land and Natural Resources for use of State resources. As this step was not completed, the pump installation permit could not be issued. Our records indicate that a water license has not yet been obtained, and this document may be a step toward that end.
The State Historic Preservation Division also opined that an archaeological field inspection should be conducted to determine whether historic sites are present and at risk; the document confines its review to the well site without addressing whether the use of the property as a quarry affects historic sites.

If there are any questions, please contact Charley Ice at 587-0218.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Cc:

c: DLNR, Land Division
TO: Mr. Charley Ice  
Dept. Of Land and Natural Resources  
Commission on Water Resource Management  
P. O. Box 621  
Honolulu, Hawai‘i 96809

DATE: August 19, 2008

SUBJECT: Pu‘unene Production Well (TMK 3-8-008:031(port.))

Enclosed is/are:

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<td>(Draft) Draft Environmental Assessment</td>
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For approval: For your use  
For necessary action: As requested  
For your review: For your signature  
For your files: Returning

REMARKS: As discussed over the telephone, we are providing the attached draft document for your review and comment. After receiving your comments, we will revise the document and coordinate with your office to file the Draft Environmental Assessment with the Office of Environmental Quality Control.

If there are any questions, please let me know.

Signed: Michael T. Munekiyo, A.I.C.P.  
Project Manager

Copy to: Dave Gomes, Hawaiian Cement (w/ enclosure)
well PIP expires 4/29/08

needs a water license from LD and we should actually put PIP on hold until they get one.

Ken, apparently none of these acceptance letters go out...
Mr. Michael T. Munekiyo, AICP
Munekiyo and Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Dear Mr. Munekiyo:

SUBJECT: Hawaiian Cement Puunene Production Wells (Well No. 4926-02)

FILE NO.: TMK: (2) 3-8-008:031

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore, all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii’s water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at http://www.hawaii.gov/ldnrlcwrmlforms.htm.

Our comments related to water resources are checked off below.

☐ 1. We recommend coordination with the county to incorporate this project into the county’s Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.

☐ 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

☐ 3. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer’s acceptance of any resulting requirements related to water quality.

Permits required by CWRM: Additional information and forms are available at www.hawaii.gov/ldnrlcwrmlforms.htm.

☐ 4. The proposed water supply source for the project is located in a designated ground-water management area, and a Water Use Permit is required prior to use of ground water.

☐ 5. A Well Construction Permit(s) is (are) required before the commencement of any well construction work.

☒ 6. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
7. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

8. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.

9. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.

10. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.

11. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.

12. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

13. We recommend that the report identify feasible alternative non-potable water resources, including reclaimed wastewater.

OTHER:
A well construction permit was issued and the well drilled. Your letter correctly notes that the well completion report has not yet been accepted. In addition, the issued pump installation permit is being suspended until we receive notice of approval of a required water license from the Board of Land and Natural Resources (notice attached).

If there are any questions, please contact Charley Ice at 587-0251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Class

c: DLNR. Land Division

DRF-GN 03/02/2006
DATE: 4/23/09

TO: ENG

CC:

- CHAIRPERSON
- DEPUTY DIRECTOR
- DEPUTY WATER
- ATG/LAND TRANS.
- BOC
- CWRM
- DAR
- DATA
- DOBOR
- DOCARE

DOFAW
ENG.
FISCAL
KIRC
LAND
OCCL
PARKS
PERSONNEL
PIO
SHPD

COMMENTS/REMARKS: Eric coord w/ Ken & CWRM

TRACK (if circled)

ACTION APPROVED BY:

ACTION:

- Draft reply for my signature*
- Direct reply – copy to me*
- Investigate - reply to me*
- Update/comment – reply to me*
- For your information/files
- Distribute to office staff
- Other (see below comments)

*For tracking purposes, please refer to log number
Laura H. Thielen, Chairperson
State of Hawai‘i
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawai‘i 96809

SUBJECT: Early Consultation Request for Hawaiian Cement Pu‘unene Production Wells Project; TMK (2)3-8-008:031; Pu‘unene, Maui, Hawai‘i

Dear Ms. Thielen:

Hawaiian Cement is proposing the conversion of an existing exploratory well (Well No. 4926-02), Pu‘unene-Hawaiian Cement Exploratory Well, into a production well, located at Tax Map Key (TMK) No. (2)3-8-008:031 in Pu‘unene, Maui, Hawai‘i. See Figure 1 and Figure 2. Hawaiian Cement leases the subject property from the State of Hawai‘i. Access to the project is currently provided from Mokulele Highway via Kama‘aina Road and an access easement.

The objective of converting the exploratory well into a production well is to provide Hawaiian Cement with sufficient water supply to safely operate its concrete batching and quarrying operations. Well No. 4926-02 was constructed in accordance with approved well construction and pump installation permits issued by the Department of Land and Natural Resources (DLNR), Commission on Water Resource Management. The conversion of the well from exploratory to production will not involve any further construction. Except for the issuance of an approval of the well completion report to operate from the Commission on Water Resource Management, there are no further actions required on behalf of Hawaiian Cement in order to implement the conversion.

The installation of the existing exploratory well was considered an exempt action with regards to Chapter 343, Hawai‘i Revised Statutes (HRS), as a test well is a specified DLNR exemption. However, inasmuch as the proposed conversion to a production well involves the use of State lands and does not qualify as an exempt action, an environmental assessment (EA) will be prepared in accordance with Chapter 343, HRS. On behalf of Hawaiian Cement, we are seeking early consultation comments in preparing the Draft EA document. With this in mind, we would appreciate receiving any written comments you
may have regarding the proposed action by May 12, 2008. Please address your comments to the following:

Munekiyo & Hiraga, Inc.
Attention: Michael T. Munekiyo
305 High Street, Suite 104
Wailuku, Hawai‘i 96793

If you have any questions or require additional information, please do not hesitate to call me at (808) 244-2015.

Very truly yours,

[Signature]
Michael T. Munekiyo, A.I.C.P.
Project Manager

MTM:Ifm
Enclosures
F:\DATA\Hawn\CentPuuNeneWell 1330\agencyletters.merge.wpd
Figure 1 Hawaiian Cement Production Well Regional Location Map
Figure 2 Hawaiian Cement Production Well Site Location Map

Source: Maui County Real Property Tax

Prepared for: Hawaiian Cement
April 29, 2008

Mr. Michael Robertson
Wailani Drilling, Inc.
P.O. Box 790299
Paia, HI 96779

Dear Mr. Robertson:

Suspension of Pump Installation Permit
Puunene-Hawaiian Cement Well (Well No. 4926-02)

As noted in the comments by the Land Division of the Department of Land Natural Resources, transmitted to you with your well construction permit on November 21, 2006, a water license must be obtained before water may be used from this well.

We do not have documentation that the water license has been obtained; therefore, the pump installation permit portion of the permitting requirements is suspended until that documentation is received. No further work on pump installation should be done, subject to fines of up to $5,000 per day. For further information, please contact Gary Martin of the Land Division at 587-0421.

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

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

CI:ss

c: Hawaiian Cement
Dear Mr. Robertson:

Well Completion Report Part I for Well No. 4926-02

We received the final well construction reporting requirement for the Puunene-Hawaiian Cement Well (Well No. 4926-02) on September 6, 2007 and acknowledge that your Well Completion Report Part I is complete.

This completes your obligation under the well construction permit. A certificate of well construction completion will be issued to the well operator/landowner and you will receive a copy. This certificate transfers responsibility of specific aspects of well usage and maintenance from you to the well operator/landowner.

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

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

CI: ss

c: Hawaiian Cement
April 29, 2008

Mr. Dave Gomes
Hawaiian Cement
P.O. Box 488
Kahului, HI 96732

Dear Mr. Gomes:

Certificate of Well Construction Completion for Well No. 4926-02

We are pleased to inform you that the Well Construction work permitted for the Puunene-Hawaiian Cement Well (Well No. 4926-02) is complete and acceptable and welcome you as a new member to the community of well owners and groundwater users in Hawaii.

To protect Hawaii's natural ground water resources for the benefit of all, the following requirements apply to the use of your well:

1. Before this well can be pumped on a regular basis, a certificate of pump installation completion must be obtained.
2. If the well is not in use it must be properly capped.
3. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with § 13-168-12(f) prior to any well sealing or plugging work.
4. In the event that the well operator and/or landowner changes, the Commission shall be notified of the change prior to the change, and all forms shall be transferred to the new owner.
5. In the event the benchmark in the concrete base of the well is altered in any way, an updated elevation survey (page 5 of the Well Completion Report Part I) shall be submitted to the Commission. The Well Completion Report Part I can be obtained by contacting staff or at www.hawaii.gov/dlnr/cwnnlforms.htm

Because groundwater in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions, or any other provision of the Hawaii Administrative Rules, may be subject to fines of up to $5,000/day. The Commission needs your help and asks that you do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

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

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Ci:ss

c: Maui Department of Water Supply
Wailani Drilling, Inc.
just pulled the file. need to go to the board to issue RP. Applicant will need to comply with 343. will send letter to Hawaiian cement outlining the process and cc to you as well - FYI

DanO

Anything new on their water license?
FROM: ROY  
TO: ANAKALEA, P.  
CHING, F.  
CHONG, R.  
DANBARA, S.  
ENGLAND, D.  
FUJI, N.  
HARDY, R.  
HOAGBIN, S.  
ICE, C.  
IMATA, R.  
CHING, F.  
CHONG, R.  
DANBARA, S.  
ENGLAND, D.  
FUJI, N.  
HARDY, R.  
HOAGBIN, S.  
ICE, C.  
IMATA, R.  

COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: 9/11/07  
SUSPENSE DATE:  
INIT: 
TO: KAWAHARA, K.  
KIMURA, J.  
KUNIMURA, I.  
NAKAMA, L.  
OHYE, M.  
SAKODA, E.  
SWANSON, S.  
UYENO, D.  
YODA, K.  
YOSHINAGA, M.  

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

WCP___ complete? Work w/Diane on this.
Charley this piecemeal substance is making things hard. LD said water license required - we should suspend PIP until that is resolved.
initially transmitted 05/15/07, w/o data running past 180 min (no recovery)
Wailani Drilling, Inc.
Lic.#C57-20115
PO BOX 790299
PAIA, HAWAII 96779

PHONE: (808) 579-8768
FAX: (808) 579-8769
wailani2@msn.com

FAX COVER

DATE: 9/6/07
FAX TO #: 587 0219
FROM: Michael Robertson
ATTN: Charles J. Coene
RE: CR Test
PAGES: 4 (including cover)
**CONSTANT-RATE PUMP TEST DATA**

Pumped Well No. 4926-02  
Pumped Well Name Puwamec  
Target Q 250 gpm  
Observation well no. N/A  
Distance between Obs. & Pumped Well NA ft  
Reference pt. for depth to water 177.65 ft. msl  
Static Water Level @ start of test 2.65 ft. msl

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

START TEST  
Date: 6/8/07  
Time of day: 900 AM

Flow Meter Reading Start: 22520 gals

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1. Chloride sampling required
2. Use same ending drawdown figure as start for recovery
Table 2 (CRPTD Form 12/17/97)

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<th>Actual elapsed time (min)</th>
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<th>Recovery Drawdown (unadjusted to nearest 0.1 ft)</th>
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<th>EC (µhos)</th>
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**END TEST**  Date: __06/18/07__  Time of day: __5:05 PM__

**ADDITIONAL REMARKS:**

Person in charge of pump test (print): **Michael Robertson**

Signature: **Michael Robertson**

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
MEMO and ROUTE SLIP (ver. 5/16/07) 08/22/07

Pu‘unēnē - Hawai‘i Cement

**WCR 1 Check for Well No. **4926-02** (survey to regulation memo)**

1. **Pump Tests Check**  Diane. England (initial)
   - 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. **Well Log Check**  Geology Code for Well Index: **IK**
   - D. England (initial) **(Kula Volcanics)**

3. **Construction Check**  Mitch Ohye (initial)
   - data complete
   - followed Special Cond & elevations
   - well database updated
   - Latitude
   - NAD27 20 A 11 L
   - NAD83 20 24 00
   - Longitude
   - 145 26 57

4. **Charley/Lenore/Ryan** (initial) take action based on above analysis

5. Roy________ (initial) check (Entered WCR 1/WCCC accept date into database)

6. Susan Hoagbin________ (initial) finalize

7. Mitch________ (initial) signature (Entered PIP issue date if required)

8. Charley/Lenore/Ryan File

**ATTACHMENTS FOR PUMP INSTALLATION PERMIT (2x):**
1 COVER LETTER
2 COUNTY COMMENTS (DWS/PSMA)
3 DOH COMMENTS
4 DLNR COMMENTS (LD/OCCU/DHP)
5 WCR 1 Accept
6 WCB Const. Completion Certificate

---

not necessary – only WCP or BOTH.

To be sent to driller/pump installer

To Landowner

Staff internal checks
Pump Test Analysis – Comments

Well ID: 4926-02
Date: 9/5/07
Geologist: Diane England

Step Drawdown Test

1. Chloride sample not collected at end of test.

Constant Rate Pumping Test

1. No test comments. Pumping rate of 250gpm or less OK.

Well Interference & Stream Impacts

1. K & T could not be estimated from the drawdown curve due to static drawdown. Based on low level of static drawdown (0.5ft), K & T are high.
2. One-mile drawdowns for stream and well impacts could not be calculated because K & T were not determined.
3. Two wells, 4926-01 and 4927-01 are located within 1-mile of 4926-02. No impacts are anticipated due to high K & T.
4. No natural streams or drainage channels are located within 1-mile of 4926-02.
Step Drawdown Test
Well 4926-02 (6/7/07)

Pumping Rate
Well 4926-02 (6/7/07)
WELL ID: 4926-02

INPUT

Construction:
- Casing dia. \( (d_c) \): 8 Inch
- Annulus dia. \( (d_w) \): 8 Inch
- Screen Length (L): 20 Feet

Depths to:
- water level (DTW): 175 Feet
- Top of Aquifer: 175 Feet
- Base of Aquifer: 195 Feet

Annular Fill:
- across screen: Open Hole
- above screen: Cement

Aquifer Material: Permeable Basalt

FLOW RATE: 250 GPM

COMPUTED

Aquifer thickness = 20 Feet
Slope = 0 Feet/log10

K = #N/A Feet/Day
T = #N/A Feet^2/Day

REMARKS:
Cooper-Jacob analysis of single-well aquifer test

Slope of drawdown plot is too low to calculate K and T. Extremely high K and T.

Analysis Program: USGS Aquifer Test Analysis Spreadsheets v.1.2, Open File Report 02-197
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</tr>
<tr>
<td>32</td>
<td>1/0/00 9:00:00</td>
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</tr>
<tr>
<td>33</td>
<td>1/0/00 10:00:00</td>
<td></td>
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</tr>
</tbody>
</table>
- only

- fax sent  8/13? (check if plan has)

- water license renewed before CPC
Return Receipt Fax Memo

Charley,

Enclosed are the following items:

   _____ WCR 1 for John Varel & Hawaiian Cement
   _____ WCPA for Piiholo South

Please confirm receipt of these documents by checking off the enclosed items and faxing a copy of this memo to me at 808-579-8769.

Thank you,

Michael Robertson
WELL CONSTRUCTION PERMIT

Puunene-Hawaiian Cement Well, Well No. 4926-02

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Puunene-Hawaiian Cement Well (Well No. 4926-02) at TMK 3-8-8:31, Maui, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) 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. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/forms.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.

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

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

6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources’ Division of Historic Preservation.

7. 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.

8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/forms.htm for current form).

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

11. 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 the date the permit expires.

12. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project the permittee must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

13. 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.

14. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with Hawaii Administrative Rules §13-168-12(f).

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

Date of Approval: November 20, 2006
Expiration Date: November 20, 2008

PETER T. YOUNG, 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 have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Driller’s Signature: 
C-57 License #: 20115
Date: 12/2/06
Printed Name: Michael Robertson
Firm or Title: Wailani Drilling, Inc.

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
1. State Well No.: 4726-02  Well Name: Puunene - Hawaiian Cement  Island: Maui
2. Address: P.O. Box 488 Kahului, HI 96732  Tax Map Key: 3-8-08: P14831
4. Drilling method used during construction:  ☑ Rotary  ☑ Percussion  ☑ Other (describe)
5. Date Well Construction (drilled, cased, grouted) completed: 6/5/07  Attach Completed Driller's Log
6. Was the subject well cored?  ☑ Yes  ☑ No
7. Step-Drawdown Test completed?  ☑ No  ☑ Yes  Attach Step-Drawdown Test form (12/17/97 SDPTD Form)
8. Constant Rate Aquifer Test completed?  ☑ No  ☑ Yes  Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)

<table>
<thead>
<tr>
<th>Water Level Data:</th>
<th>Reference point elevation</th>
<th>Depth to water (feet)</th>
<th>Water Level ft. above mean sea level (see note below)</th>
<th>Date/time of measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Initial encountered during drilling</td>
<td>Ground = 176 ft. msl</td>
<td>174.0</td>
<td>2</td>
<td>6/5/07</td>
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<tr>
<td>(this should also be filled in on the driller's log)</td>
<td></td>
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</tr>
<tr>
<td>10. Just prior to casing installation</td>
<td>Ground = 176 ft. msl</td>
<td>174.0</td>
<td>2</td>
<td>6/5/07</td>
</tr>
<tr>
<td></td>
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<tr>
<td>11. After casing installation</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(this information should be before any pump tests are</td>
<td>If this reference</td>
<td>175.0</td>
<td>2.65</td>
<td>6/5/07</td>
</tr>
<tr>
<td>performed with casing installed)</td>
<td>point is not the</td>
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<td></td>
<td>benchmark, the</td>
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<td></td>
<td>difference between the</td>
<td></td>
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<tr>
<td></td>
<td>benchmark and</td>
<td></td>
<td></td>
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<td></td>
<td>this point is:</td>
<td></td>
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<tr>
<td></td>
<td>0.39 ft.</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: For all elevations referenced to mean sea level, take the ground elevation (surveyed or estimated if survey not required at this time) and subtract the depth to the water level.

12. As-built section filled in completely ☑
13. Photograph of well and concrete pad showing benchmark on concrete pad attached ☑
14. GPS coordinates provided in degrees, minutes, seconds ☑
15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)
16. Remarks:

Licensed Driller (print)  Michael Robertson  C-57 Lic. No. 20115
Signature  Michael Robertson  Date  7/10/07
12. AS-BUILT WELL SECTION  
(Please attach as-built if different from diagram provided below)

Elevation at top of casing: 177.65 ft.
Hole Diameter: 14.5 in.

Minimum of 2' Radius & 4" Thick Concrete Pad
Ground Elevation: 175.25 ft.

Solid Casing: (≥ 90% x (Ground Elev.-Water Level Elev))
Length: 176 ft.
Nominal Diameter: 8 in.
Wall Thickness: 0.25 in.
Bottom Elevation: 0 ft., msl

Open Casing: 
Perforated
Screen

Length: 20 ft.
Nominal Diameter: 8 in.
Wall Thickness: 0.25 in.
Bottom Elevation: -20 ft., msl

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

---

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more):  
  - ANSI/AWWA C200  
  - API Spec. 5L  
  - ASTM A53  
  - ASTM A139  
  And compliant with (check one or more):  
  - ASTM A242 or A606  
  - Type E  
  - Type S  
  - Grade B  
  - Other  
- Stainless Steel: (check one):  
  - ASTM A409 (production wells)  
  - ASTM A312 (monitor wells)  
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one):  
  - Schedule 40  
  - Schedule 80  
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):  
  - Schedule 40  
  - Schedule 80  
  - Schedule 120
- Thermoset Plastic: (check one)  
  - Filament Wound Resin Pipe conforming to ASTM D2996  
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997  
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517  
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950  
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296  
  - FEP Fluorocarbon Tubing conforming to ASTM D3296

**Open Casing Material:**
- Carbon Steel: compliant with (check one or more):  
  - ANSI/AWWA C200  
  - API Spec. 5L  
  - ASTM A53  
  - ASTM A139  
  And compliant with (check one or more):  
  - ASTM A242 or A606  
  - Type E  
  - Type S  
  - Grade B  
  - Other  
- Stainless Steel: (check one):  
  - ASTM A409 (production wells)  
  - ASTM A312 (monitor wells)  
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one):  
  - Schedule 40  
  - Schedule 80  
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):  
  - Schedule 40  
  - Schedule 80  
  - Schedule 120
- Thermoset Plastic: (check one)
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - 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

---

WCR1 Form 5/12/07 Page 2 of 5
WELL NUMBER: 4926-02  In addition to the driller's log, if a geologic log was prepared, please submit with this form

<table>
<thead>
<tr>
<th>Depths (ft)</th>
<th>Rock Description</th>
<th>Water Level</th>
<th>Cl-</th>
<th>Dates</th>
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<tbody>
<tr>
<td>0 to 25</td>
<td>Clay &amp; Boulders</td>
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<td></td>
<td>5/29/07</td>
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<td>25 to 60</td>
<td>Tan Rock</td>
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<tr>
<td>60 to 105</td>
<td>Blue rock</td>
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<td></td>
</tr>
<tr>
<td>105 to 150</td>
<td>Tan Rock</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150 to 190</td>
<td>Blue rock</td>
<td></td>
<td></td>
<td>5/29</td>
</tr>
<tr>
<td>190 to 196</td>
<td>Cinders &amp; Lava</td>
<td></td>
<td></td>
<td>5/30</td>
</tr>
</tbody>
</table>

Remarks:
Attach photos of completed well and concrete pad

SKETCH OF WELL LOCATION
(Referenced to permanent landmark, i.e. building, road, fence, etc.)
Provide Latitude and Longitude of well referenced to NAD83 to nearest second

NAD83:
Latitude: 20 degrees 49 min 02 sec
Longitude: 154 degrees 57 min 18 sec

EXAMPLE
Proj. Line
Lat: 19°36'45"
Long: 154°57'18"

WCR1 Form 6/12/07 Page 4 of 5
Well Elevation

Benchmark Elevation 177.26

Attach photos of completed well and concrete pad showing benchmark location.

I certify that the elevation shown above:

1) Was done in accordance with acceptable surveying practices
2) Is accurate to the nearest 0.01 ft.
3) Is referenced to mean sea level

Surveyor  Kirk T. Tanaka
License No. 7223-LS
Date 06/12/07
**STEP-DRAWDOWN PUMP TEST DATA**

(not required for wells producing < 100,000 gpd or 70 gpm)

Pumped Well No. 4926-02  
Observation Well No. N.A.

Pumped Well Name: Pumene HT cement  
Distance between Obs. & Pumped Well: N.A. ft.

Target Q: 300 gpm  
Reference pt. for depth to water: 177.65 ft. msl

Static Water Level @ start of test: 2.65 ft. msl

Water level measurements by:  
- electrical sounder  
- pressure transducer  
- airline

**START TEST**

Date: 10/7/07  
Time of day: 9:00 AM

Flow Meter Reading Start: 0.5 gallons

| Suggested Elapsed Time (min) | Actual Elapsed Time (min) | Depth to water (nearest 0.1 ft) | Drawdown \(\text{S} \) (unadjusted to nearest 0.1 ft) | Pumping rate \(Q\) (gpm) | EC (\text{umhos}) | Temp. \(^\circ F\) or \(^\circ C\) | CF | Data in this table is for:  
<table>
<thead>
<tr>
<th></th>
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<td></td>
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<td></td>
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<tr>
<td>-30</td>
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<td></td>
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<td></td>
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<tr>
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<td>0</td>
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<td></td>
<td>175.0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 1                           |                          | 175.50                        | 0.50                          | 200                      |                |                  |   | Start test/Step 1  
| 1.5                         |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 2                           |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 2.5                         |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 3                           |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 4                           |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 5                           |                          | 175.49                        | 0.49                          | 200                      |                |                  |   |  
| 6                           |                          | 175.49                        | 0.49                          | 200                      |                |                  |   |  
| 7                           |                          | 175.49                        | 0.49                          | 200                      |                |                  |   |  
| 8                           |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 10                          |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 15                          |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 20                          |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 25                          |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 30                           |                          | 175.50                        | 0.50                          | 200                      |                |                  |   | Chloride sample taken  
| 31                          |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 40                          |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  
| 50                           |                          | 175.50                        | 0.50                          | 200                      |                |                  |   |  

***Step 2 begin?***
<table>
<thead>
<tr>
<th>Suggested Elapsed Time (min)</th>
<th>Actual Elapsed Time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown S (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (at least 3 steps) (gpm)</th>
<th>EC (µmhos)</th>
<th>Cl (mg/l)</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
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<td>175.60</td>
<td>.60</td>
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<tr>
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<td>175.61</td>
<td>.61</td>
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<tr>
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<td>175.68</td>
<td>.68</td>
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</tr>
<tr>
<td>80</td>
<td></td>
<td>175.67</td>
<td>.67</td>
<td></td>
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<td>175.67</td>
<td>.67</td>
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<td></td>
</tr>
</tbody>
</table>

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

Begin recovery data next page
Flow meter reading at end of pumped period: 2520 gals

1 starting pumping rate Q
2 minimum length of step period of constant pumping rate
3 minimum mandatory Chloride (Cl) measurement/sampling at end of every step
4 Use same ending drawdown figure as start for recovery
<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth To Water (nearest 0.1 ft) recovered</th>
<th>Pumping rate (gpm)</th>
<th>Temp. °F or °C</th>
<th>Cl⁻ or mg/l</th>
<th>Observation Well Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>175.67</td>
<td>0</td>
<td></td>
<td></td>
<td>Pump off, start recovery</td>
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<tr>
<td>1</td>
<td>1</td>
<td>175.58</td>
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<td>2</td>
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**END TEST**  Date: **6/1/07**  Time of day: **10:40 AM**

**ADDITIONAL REMARKS:**

**Person in charge of pump test (print):** Michael Robertson

**Signature:**

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
**CONSTANT-RATE PUMP TEST DATA**

Table 2 (CRPTD Form 12/17/87)

Pumped Well No. **4926-02**  
Pumped Well Name **Pumpage Art Cen**  
Target Q **250 gpm**  

Observation well no.  
Distance between Obs. & Pumped Well **NA** ft.  
Reference pt. for depth to water **177.685** ft. msl  
Static Water Level @ start of test **2.65** ft. msl

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

START TEST Date: **6/8/07**  
Time of day: **900 AM**

Flow Meter Reading Start: **22520 gals**

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<th>Actual elapsed time</th>
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<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
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<th>Cl (mg/l)</th>
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Max possible duration: water level or quality did not stabilize for any 24 period

Begin recovery data next page
Flow meter reading at end of pumped period: 142543 gals

1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery
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END TEST Date: 6/8/07 Time of day: 5:05 PM

ADDITIONAL REMARKS:

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

Signature: [Signature]

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
WELL CONSTRUCTION PERMIT

Puunene-Hawaiian Cement Well, Well No. 4926-02

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Puunene-Hawaiian Cement Well (Well No. 4926-02) at TMK 3-8-8.31, Maui, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairman 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. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

3. The well constructed shall be for construction and testing of the well only. The permittee shall coordinate with the Chairman and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contact Commission staff or at www.hawaii.gov/dbar/wrma/forms.htm). The permittee shall submit to the Chairman the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairman. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity, described on the pump test, does not support the capacity.

4. In well bored water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (414 times initial head) of the basal ground water unless otherwise authorized by the Chairman.

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

6. Exceptional significant components such as artesians, basins or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources, Division of Historic Preservation.

7. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established streams.

8. A Well Completion Report Part I shall be submitted to the Chairman within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dbar/wrma/forms.htm for current form).

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and any related staff submitted approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

11. Any variances from the HWCPIS shall be approved by the Chairman prior to invoking the variance.

12. 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 Chairman upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairman no later than the date this permit expires.

13. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project the permittee must apply for a well abandonment permit in accordance with §13-168-1(2) prior to any well sealing or plugging work.

14. 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.

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

W. Roy family

Date of Approval: November 20, 2006
Expiration Date: November 20, 2008

PETER T. YOUNG, 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 the conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Driller’s Signature: [Signature]

C-57 License #: 20115 Date: 12/3/66

Printed Name: Michael Robertson

Firm or Title: Wailani Drilling, Inc.

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

Attachment
1. State Well No.: 4926-02  
   Well Name: Paunene-Hawaiian Cement  
   Island: Maui

2. Address:  
   P.O. Box 483 Kahului, HI 96732  
   Tax Map Key: 3-8-02: P1+F31


4. Drilling method used during construction:  
   ✔ Rotary  
   □ Percussion  
   □ Other (describe)

5. Date Well Construction (drilled,cased,grouted) completed: 6/5/07  
   Attach Completed Driller's Log

6. Was the subject well cored?  
   □ Yes  
   □ No

7. Step-Drawdown Test completed?  
   □ No  
   ✔ Yes  
   Attach Step-Drawdown Test form (12/17/77 SDPTD Form)

8. Constant Rate Aquifer Test completed?  
   □ No  
   ✔ Yes  
   Attach Constant Rate Aquifer Test form (12/17/77 CRPTD Form)

<table>
<thead>
<tr>
<th>Water Level Data</th>
<th>Reference point elevation</th>
<th>Depth to water (feet)</th>
<th>Water Level ft. above mean sea level (see note below)</th>
<th>Date/time of measurement</th>
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</thead>
<tbody>
<tr>
<td>8. Initial encountered during drilling</td>
<td>Ground = 77 ft. msd</td>
<td>174.0</td>
<td>2</td>
<td>6/1/07</td>
</tr>
<tr>
<td>10. Just prior to casing installation</td>
<td>Ground = 77 ft. msd</td>
<td>174.0</td>
<td>2</td>
<td>6/8/07</td>
</tr>
<tr>
<td>11. After casing installation</td>
<td>If this reference point is not the benchmark, the difference between the benchmark and this point is: 175.0 - 174.0 = 1 ft.</td>
<td>2.65</td>
<td>4/5/07</td>
<td></td>
</tr>
</tbody>
</table>

   Chloride: 500 ppm, Temperature: 70 °F

   Note: For all elevations referenced to mean sea level, take the ground elevation (surveyed or estimated if survey not required at this time) and subtract the depth to the water level.

9. After casing installation (this information should be before any pump tests are performed with casing installed)

10. Chloride: 500 ppm, Temperature: 70 °F

12. As-built section filled in completely ✔

13. Photograph of well and concrete pad showing benchmark on concrete pad attached ✔

14. GPS coordinates provided in degrees, minutes, seconds ✔

15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)

16. Remarks:

Licensed Driller (print) Michael Robertson  
C-67 Lic. No. 20115  
Date 7/10/07
12. AS-BUILT WELL SECTION

(Please attach as-built if different from diagram provided below)

**Hole Diameter:** 14.5 in.

**Ground Elevation:** 175.3 ft., msl □ Surveyed □ Estimated

**Minimum of 2 Radius & 4" Thick Concrete Pad**

**Level Elevation:** 80.2 ft., msl

**WELL DIA:** 4.75 ft.

**Nominal Diameter:** 8 in.

**Wall Thickness:** 0.25 in.

**Bottom Elevation:** -20 ft., msl

**Open Casing:** □ Perforate □ Screen

**Length:** 30 ft.

**Nominal Diameter:** 8 in.

**Wall Thickness:** 0.25 in.

**Bottom Elevation:** NA ft., msl

**Open Hole:** NA ft.

**Diameter:** NA in.

**Bottom Elevation:** NA ft., msl

---

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A136
  - And compliant with (check one or more): □ ASTM A242 or A606 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one):
  - □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  - □ Filament Wound Resin Pipe conforming to ASTM D2996
  - □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - □ FEP Fluorocarbon Tubing conforming to ASTM D3296

**Open Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
  - And compliant with (check one or more): □ ASTM A242 or A606 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one):
  - □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  - □ Filament Wound Resin Pipe conforming to ASTM D2996
  - □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - □ 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
SKETCH OF WELL LOCATION
(Referenced to permanent landmark, i.e. building, road, fence, etc.)
Provide Latitude and Longitude of well referenced to NAD83 to nearest second

NAD83:
Latitude: 20 degrees 49 min 0.9 sec
Longitude: 156 degrees 26 min 43.3 sec

Attach photos of completed well and concrete pad

EXAMPLE
Lat: 19°36'45"
Long: 154°57'18"
Well Elevation

Benchmark Elevation 177.26

Attach photos of completed well and concrete pad showing benchmark location.

I certify that the elevation shown above:

1) Was done in accordance with acceptable surveying practices
2) Is accurate to the nearest 0.01 ft.
3) Is referenced to mean sea level

Surveyor Kirk T. Tanaka
License No. 7223-LS
Date 06/12/07
DRILLER'S LOG

WELL NUMBER: 4926-02 In addition to the driller's log, if a geologic log was prepared, please submit with this form:

<table>
<thead>
<tr>
<th>Depths (ft)</th>
<th>Rock Description</th>
<th>Water Level</th>
<th>C- Dates</th>
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<td>Clay Boulders</td>
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<tr>
<td>60 to 105</td>
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<td>105 to 150</td>
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<td>190 to 196</td>
<td>Cinders 2.5</td>
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Remarks:

WCR1 Form 6/12/07 Page 3 of 5
### CONSTANT-RATE PUMP TEST DATA

**Pumped Well No.** 4926-02
**Pumped Well Name** Pumper Hts
**Target Q** 250 gpm

**Observation well no.**
**Distance between Obs. & Pumped Well** A ft
**Reference pt. for depth to water** 177.6 ft. msl
**Static Water Level @ start of test** 2.65 ft. msl

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

**START TEST Date:** 09/07
**Time of day:** 9:00 Am

**Flow Meter Reading Start:** 22520 gals

<table>
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<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown (unadjusted for incidence, nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (ppm)</th>
<th>CI (mg/l)</th>
<th>Temp °F</th>
<th>Remarks</th>
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</table>

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

**Remarks**
- Start Test
- Start pump/CI taken
### Table 2 (CRPTD Form 12/17/97)

<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate (gpm)</th>
<th>EC (µhos)</th>
<th>Cl⁻ (mg/l)</th>
<th>Remarks</th>
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</tbody>
</table>

1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery

Max possible duration: water level or quality did not stabilize for any 24 hour period.

Begin recovery data next page.

Flow meter reading at end of pumped period: 1425 43
gals

---

1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery
### Table 2 (CRPTO Form 12/17/57)

<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Recovery Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (units)</th>
<th>Cl⁻ (mg/l)</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
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**End Test Date:** 6/8/07 **Time of Day:** 5:05 PM

**Additional Remarks:**

Person in charge of pump test (print): **Michael Robertson**

Signature: **Michael Robertson**

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
**STEP-DRAWDOWN PUMP TEST DATA**

(not required for wells producing < 100,000 gpd or 70 gpm)

Pumped Well No. 4926-02  
Observation Well No.  N/A  

Pumped Well Name Fuenga H florent  
Distance between Obs. & Pumped Well  N/A ft.  

Target Q 300 gpm  
Reference pt. for depth to water  177.65 ft. msl  

Target Q 300 gpm  
Reference pt. for depth to water  177.65 ft. msl  

Water level measurements by:  
- electrical sounder  
- pressure transducer  
- airline  

**START TEST**  
Date: 07/17/07  
Time of day: 9:00 AM  
Flow Meter Reading Start: 0.5 gallons

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<th>Recovery Drawdown S (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (mS/m)</th>
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**END TEST**  Date: 6/8/07  Time of day: 5:05 PM

**ADDITIONAL REMARKS:**

Person in charge of pump test (print): **Michael Robertson**

Signature: **Michael Robertson**

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
<table>
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<tr>
<th>Suggested Elapsed Time (min)</th>
<th>Actual Elapsed Time (min)</th>
<th>Depth to Water (nearest 0.1 ft)</th>
<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping Rate Q (at least 3 steps) (gpm)</th>
<th>EC (in mhos)</th>
<th>Cl' (mg/l)</th>
<th>Temp °F or °C</th>
<th>Remarks</th>
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Max possible duration, water level or quality did not stabilize for any 24 period.

Begin recovery data next page.

Flow meter reading at end of pumped period:

22520 gals

1. starting pumping rate Q
2. minimum length of step period of constant pumping rate
3. minimum mandatory Chloride (Cl') measurement/sampling at end of every step
4. Use same ending drawdown figure as start for recovery
### Table: Pump Test Data

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<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth To Water (nearest 0.1 ft)</th>
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<th>Pumping rate Q (gpm)</th>
<th>EC (μS/cm)</th>
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**END TEST** Date: 08/16/07  Time of day: 10:50 AM

**ADDITIONAL REMARKS:**

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

Signature: [Signature]

This signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
Wailani Drilling, Inc.
Michael Robertson • Lic. #C57-20115
P.O. Box 790269 • Peia, HI 96779
Phone: 808-579-8768 • Fax: 579-8769
E-mail: waikane2@msn.com

FAX COVER

DATE: 8/10/07

FAX TO #: 587 0219

FROM: Mike Robertson

ATTN: Charlie Ice

RE: HI Cement Signed Permit

John Vandal WCR I

PAGES: (including cover) 11

Thank you

Michael
COMMISSION ON WATER RESOURCE MANAGEMENT

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"another late one, but forward to Mike to let him know to be extra careful in this area (it he hasn't started already)."
January 22, 2007

Mr. Dean A. Nakano
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawai‘i 96809

Dear Mr. Nakano:

SUBJECT: Chapter 6E-8 Historic Preservation Review -
Well Construction/Pump Installation Permit Application (Well Number 4926-02) for the Proposed Installation of the Pu‘unene Hawaiian Cement Well
Pulehunui Ahupua’A, Wailuku District, Island of Maui
TMK: (2) 3-8-007:133 (portion)

Thank you for the opportunity to review and comment on the well and pump application for the proposed installation of the well and pump, which was received by our staff on June 29, 2006. Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division (SHPD).

Based on the submitted documents, the subject action for the proposed undertaking consists of the construction of one well and the installation of an associated pump.

A search of our records indicates that an archaeological survey has not been conducted of the subject property. This area in general is likely to have once been the location of pre-Contact farming, perhaps with scattered houses. Previously documented archaeological sites in the general vicinity consist of pre-Contact rock terraces, rock mounds, petroglyphs (rock carvings), modified rock outcrops, rock alignments, as well as numerous post-Contact historic properties.

Therefore, in order to determine the effect of the proposed undertaking on historic properties, we recommend that no action be taken on the proposed well and pump installation until an archaeological field inspection has been conducted in the area of the proposed access corridor and well site. The field inspection shall be conducted by an independent qualified archaeologist to determine whether historic sites are present. Our revised comments will be based on the findings of the field inspection. Please refer to the following SHPD website in order to review the current list of qualified archaeological firms: www.state.hi.us/dlnr/hpd.

Please direct any questions or concerns to the Maui Office Annex of the State Historic Preservation Division at (808) 243-5169 or (808) 243-4841.

Aloha,

Melanie Chinen, Administrator
State Historic Preservation Division

JP:mk:kf

c: Maui Cultural Resources Commission, Dept. of Planning, 250 S. High Street, Wailuku, HI 96793
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

FAX: Transmitting 3 pages, including this one; call 587-0251 with any reception problems.

TO: Mike Robertson
FROM: Charley Ice

Transmitting Mike's comments on Puunēnē-Hawaiian Cement well, FY1

Return Fax: 587-0219
Return Post: P.O.Box 621, Honolulu 96809
TO: Mike Robertson

FROM: Charles Ice

Transmitting MDWS comments on Puunēnē - Hawaiian Cement well, FY1
FROM: ROY
DATE: DEC 26 2006
SUSPENSE DATE: 

TO: ANAKALEA, P.
INIT: KUNIMURA, I.
TO: CHING, F.
INIT: NAKAMA, L.
TO: DANBARA, S.
INIT: NAKANO, D.
TO: FUJII, N.
INIT: OHYE, M.
TO: GOODING, K.
INIT: SAKODA, E.
TO: HARDY, R.
INIT: SWANSON, S.
TO: HOAGBIN, S.
INIT: UYENO, D.
TO: ICE, C.
INIT: YODA, K.
TO: IMATA, R.
INIT: YOSHINAGA, M.
TO: KIMURA, J.
INIT: 
FOR: Approval
FOR: Signature
FOR: Information
FOR: Type Draft
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FOR: Xerox copies

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

6 weeks past comment deadline
December 13, 2006

Mr. Dean Nakano, Acting Deputy Director
State of Hawaii Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Well Construction/Pump Installation Permit Application
Puunene-Hawaiian Cement Well (Well No. 4926-02)

Dear Mr. Nakano:

Thank you for the opportunity to comment on this well construction/pump installation permit application. We have the following comments:

**Aquifer Status and Proposed Amount of Withdrawal**
The proposed well would withdraw .216 MGD from Paia aquifer, which has a sustainable yield of 8 MGD. The majority of wells in Paia aquifer have no reported withdrawals in the January 2006 CWRM database. Reported withdrawals exceed 85 mgd. The proposed well would not have an immediate effect on existing DWS wells, but the overall aquifer could be impacted from the approved number of wells, should sugar cane irrigation cease over the Paia aquifer.

**Ground Water Protection**
In order to protect ground water resources, we encourage the applicant to adopt Best Management Practices (BMPs) designed to minimize infiltration and runoff from daily activities. Sample BMPs are as enumerated below.

1. Inspect exposed parts of the well periodically for problems such as: cracked or corroded well casing, broken or missing well cap, damage to protective casing, settling and cracking of surface seals
2. Slope the area around the well so that surface runoff drains away from the well
3. Provide a well cap or sanitary seal to prevent unauthorized use of or entry into the well

"By Water All Things Find Life"

The Department of Water Supply is an Equal Opportunity provider and employer. To file a complaint of discrimination, write: USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington DC 20250-9410. Or call (202) 720-5964 (voice and TDD)
4. Provide for sediment removal or well cleaning as necessary.
5. Have the well tested at least once a year for fecal coliform or other constituents that may of concern
6. Keep accurate records of any well maintenance, such as disinfection or sediment removal, that might require use of chemicals in the well.
7. Avoid mixing or using pesticides, fertilizers, herbicides, degreasers, fuels, or other pollutants near the well
8. Do not locate any type of potentially polluting activity up slope from the well

Should you have any questions, please contact our Water Resources and Planning Division at (808) 244-8550.

Sincerely,

George Y. Terada
Director

emb

c: engineering division

C:\WPdocs\Well cnstrx PIP comments\Puunene-Hawaiian Cement Well 4926-02.wpd
TO: Honorable Chiyome L. Fukino, M.D., Director Department of Health
Attention: Director’s Office
Harold Yee, Wastewater Branch
Stuart Yamada, Safe Drinking Water Branch

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Omaipo-Siele Well (Well No. 4720-01)

October 13, 2006

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by November 15, 2006. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

Class Attachment(s)

RESPONSE:

[Details of response not transcribed]
The Department of Health, Safe Drinking Water Branch has the following additional comments for the Well Construction / Pump Installation Permit Application for the Omaopio-Siele Well (Well No. 6-4720-01 Maui):

This well may qualify as a source of potable water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and may require 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.
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 521
HONOLULU, HAWAII 96826

October 13, 2006

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Director’s Office
Harold Yee, Wastewater Branch
Stuart Yamada, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Puunene-Hawaiian Cement Well (Well No. 4926-02)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by November 15, 2006. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

Ctss: Attachment(s)

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of possible water to a public water system (defined as serving 50 or more people at least 60 days per year or 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 29, Rules Relating to Public 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 public 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 as supply both possible and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow preventers by physically separating possible and non-potable systems by no air gap or an approved backflow preventer, and by clearly labeling all non-potable pipes with warning tags 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 | 1 1 1 is not located near the proposed well site (information attached).

[ ] An NPDES permit is required.

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

[ ] In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

[ ] No comments/objections

Contact Person: Stuart Yamada
Phone: 586-4258

Signed: [signature]

Date: 10/28/06
The Department of Health, Safe Drinking Water Branch has the following additional comments for the Well Construction / Pump Installation Permit Application for MBLC 
#2 Well (Well No. 2-1119-02 Kauai):

Underground Injection Control (UIC) Comments:

1. The well is located below the UIC line;

2. The siting of a drinking water source below the UIC line affects the allowed potential for new injection well construction. New injection wells will then be prohibited within the setback areas defined in Chapter 11-23. We suggest that the surrounding landowners be informed of this proposed action because it may affect the development potential of the properties within the setback area; and

3. In general, a shallow well, or a well that recharges quickly from local rainfall, should not be used as a potable water source because such a well increases the risk of having unsatisfactory groundwater quality that when consumed may compromise health. Factors that directly influence a well’s groundwater quality include wastewater disposal systems (cesspools, septic systems, drainage wells), lawn/garden/crop-growing activities, and even the proximity to the ocean where salt water intrusion may occur.
November 21, 2006

Mr. Michael Robertson  
Wailani Drilling, Inc.  
P.O. Box 790299  
Paia, HI 96799

Dear Mr. Robertson:

Pump Installation Permit  
Puunene-Hawaiian Cement Well (Well No. 4926-02)

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

**Special Conditions**

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

The permittee is responsible for all conditions of the permit. This includes ensuring the submission of a completed Well Completion Report Part II form within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

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

**IMPORTANT** - Pump installation shall not commence until a fully signed permit is returned to the Commission.

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

Sincerely,

Peter T. Young  
Chairperson

Enclosure

c: Hawaiian Cement  
USGS  
Maui DWS
PUMP INSTALLATION PERMIT
Puunene-Hawaiian Cement Well, Well No. 4926-02

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-168, entitled “Water Use, Wells, and Stream Diversion Works”, this document permits the pump installation for Puunene-Hawaiian Cement Well (Well No. 4926-02) at TMK 3-8-8:31, Maui, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) 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. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.

3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

4. The pump installation permit shall be for installation of a 300 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.

6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.

7. Well Completion Report Part II shall be submitted to the Chairperson within 60 days after completion of work. This form can be obtained by contacting staff or on the internet at www.hawaii.gov/dlnr/cwrm.

8. 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.

9. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

10. 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 the date the permit expires.

11. 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.

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

Date of Approval: November 20, 2006
Expiration Date: November 20, 2008

PETER T. YOUNG, 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 understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Installer’s Signature: __________________________ C-57, C-57a, or A License #: 20115 Date: __________

Printed Name: Michael Robertson Firm or Title: Wailani Drilling, Inc.

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
November 21, 2006

Ref: 4926-02.wcp

Mr. Michael Robertson
Waianani Drilling, Inc.
P.O. Box 790299
Paia, HI 96779

Dear Mr. Robertson:

Well Construction Permit
Puunene-Hawaiian Cement Well (Well No. 4926-02)

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

**Special Conditions**

1. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note: DOH's requirements related to discharge of effluent from well drilling and testing activities.

2. Attached for your information is a copy of the State Department of Land and Natural Resources Land Division's comments related to water lease requirements.

Please refer to the Permit Processes Worksheet (transmitted with your acknowledgement letter) for further information regarding the process of drilling a well and installing a pump.

No withdrawal of water shall be made other than for testing purposes until a certificate of pump installation completion has been issued by the Commission.

Please sign both permit originals and return one for our files. For copies of the aquifer pump test worksheet, please call staff or visit www.state.hi.us/dlnr/cwrm/forms.htm.

**IMPORTANT** - Drilling work shall not commence until a fully signed permit is returned to the Commission. The permit shall be prominently displayed or made available at the construction site during construction. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

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

Sincerely,

Peter T. Young
Chairperson

Enclosures

c: Hawaiian Cement (with applicable comments – DOH SDWB, WWB, CWB, Land Division, Maui Planning)
   USGS
   Maui DWS
WELL CONSTRUCTION PERMIT
Puunene-Hawaiian Cement Well, Well No. 4926-02

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Puunene-Hawaiian Cement Well (Well No. 4926-02) at TMK 3-8-8:31, Maui, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) 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. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/forms.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.

4. 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.

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

6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources' Division of Historic Preservation.

7. 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.

8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/forms.htm for current form).

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

11. 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 six (6) months prior to the expiration date of the permit.

12. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

13. 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 on 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.

14. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with Hawaii Administrative Rules §13-168-12(f).

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

Date of Approval: November 20, 2006
Expiration Date: November 20, 2008

PETER T. YOUNG, 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 have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Driller's Signature: [Signature]
C-57 License #: 20115
Date: [Date]

Printed Name: Michael Robertson
Firm or Title: Wailani Drilling, Inc.

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

Attachment
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR PERMIT ISSUANCE 5/19/05

FROM: CHARLEY
DATE: 20 Nov 06
TO: ANAKALEA, P.
INIT. BAUER, G.
TO: UNIMURA, I.
INIT. NAKAMA, L.
FOR: Approval
TO: NAKANO, D.
INIT. OHYE, M.
FOR: Signature
TO: SAKODA, E.
INIT. SUBIA, S.
FOR: Information
TO: SWANSON, S.
INIT. UYENO, D.
FOR: Take Action
TO: YODA, K.
INIT. YOSHINAGA, M.
FOR: Type Draft
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FOR: Type Final
TO: YODA, K.
INIT. YOSHINAGA, M.
FOR: File
TO: SUBIA, S.
INIT. UYENO, D.
FOR: Xerox ___ copies
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INIT. YOSHINAGA, M.
FOR: ___ copies

WELL NUMBER 4926-02
Puunene-Hawaiian Cement Well

ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 SDWB
4 WWB
5 CWB
6 HEER
7 LD
8 HP
9 OCCL
10 SMA

TO BE SENT TO APPLICANT

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

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY
## Well Check Program
4/1/04 - Revised for update to Well Standards (February 2004)

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<td>205</td>
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<td>Cement Grout</td>
<td>205</td>
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<tr>
<td>Grouting Method</td>
<td>other</td>
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<tr>
<td>Hole Diameter</td>
<td>14.5</td>
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<tr>
<td>Total Depth</td>
<td>225</td>
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<tr>
<td>Estimated Head</td>
<td>3.5</td>
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<td>Public Water Supply Well?</td>
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<tr>
<td>Solid Casing Material</td>
<td>steel</td>
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<td>Solid Casing Specification</td>
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<td>20</td>
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<tr>
<td>Solid Casing Wall Thickness</td>
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<tr>
<td>Open Casing Length</td>
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</table>

### Results

#### Well Depth

- **Theoretical Thickness of Aquifer**: 143.5
- **1/4 Aquifer Thickness**: 35.875
- **Depth of Well below Sea Level**: -20 okay (Section 2.2)

#### Well Casing

- **Minimum Wall Thickness**
  - Material: steel
  - Minimum Thickness per standards: #VALUE!
  - Wall Thickness Provided: 0.25 #VALUE! (Section 2.4(b))
  - Minimum Length of Solid Casing: 0
  - 90% of ground to top of aquifer: 181.35
  - Length of solid casing Provided: 205 okay (Section 2.4(c))
  - Casing Material: ASTM A53 in compliance (Section 2.4(d))
  - (for pvc only - check for 200' limit): okay (Section 2.4(d))

#### Annular Space

- **Depth of Grouting**
  - Calculated Depth of Grouting: 141.05
  - Depth of Grouting provided: 205 okay (Section 2.6(c))
  - Minimum Annular Space required: 2
  - Thickness of Annular Space: -2.76 too small (Section 2.6(d))

---

### Additional Notes
- yes
- no
- steel
- stainless steel
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

October 13, 2006

TO: Honorable Chiyoue L. Fukino, M.D., Director
Department of Health
Attention: Director's Office
Harold Yee, Wastewater Branch
Stuart Yamada, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Puunene-Hawaiian Cement Well (Well No. 4926-02)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by November 15, 2006. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

Cf:ss
Attachment(s)

RESPONSE:

[1] This well qualifies as a source which will serve as a source of possible water in a public water system (defined as serving 25 or more people at least 60 days per year or has 13 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.

[1] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 13 service connections) and if the well water is used for drinking, the parish owner should test for bacteriological and chemical parameters before initiating use and routinely monitor the water quality thereafter. However, if future plans increase to meet the public water system definition, then Director of Health approval is required prior to implementation.

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

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

[1] For the applicant's information, a source of possible wastewater contamination [1] [1] is located near the proposed well site (information attached).

[1] As NPDES permit is required.

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

[1] In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and the proposed well will be reviewed in the new location.

[1] No comments/objections

Contact Person: Stuart Yamada
Phone: 586-4258

Signed: ____________________________
Date: ____________________________
Mr. Michael W. Foley, Director  
Planning Department  
County of Maui  
250 South High Street  
Wailuku, HI 96793

Dear Mr. Foley:

Special Management Area Use Permit Requirements for  
Well Construction/Pump Installation Permit Application  
Puunene-Hawaiian Cement Well (Well No. 4926-02)

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

We would appreciate your comments on the captioned application with regard to the SMA permitting requirements specific to your division. Please respond by returning this cover memo form by November 15, 2006. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

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

Sincerely,

DEAN A. NAKANO  
Acting Deputy Director

CLASS

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:

Contact Person: Jeff Hunt  
Phone: 270-6271

Signed: Jeff Hunt  
Date: 10/30/06
TO: Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
   Attention: Director's Office
   Harold Yee, Wastewater Branch
   Stuart Yamada, Safe Drinking Water Branch
   Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
   Puunene-Hawaiian Cement Well (Well No. 4926-02)

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

We would appreciate your comments on the captioned application for any conflicts or
inconsistencies with the programs, plans, and objectives specific to your department. Please respond by
returning this cover memo form by November 15, 2006. If we do not receive comments or a request
for additional review time by this date, we will assume that you have no comments.

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

Cl: ss
Attachment(s)

RESPONSE:

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

[ ] 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.

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

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

[ ] An NPDES permit is required.

[X] Other relevant DOH rules/regulations, information, or recommendations are attached. Septic Tank Profile #5324

[ ] In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be
applicable, and we do not need to review the new location.

[X] No comments/objections

Contact Person: Lon Monikami
   Phone: 586-4244
   Date: 10-31-06

Signed: Lon Monikami
A septic tank file has been found and the following information is provided. In general, the Department of Health has reviewed and approved of the plans based on the information submitted as verification that a treatment individual wastewater system (IWS) such as a septic tank was constructed and authorized to be used for wastewater disposal from a building/dwelling.

Tax Map Key (2) 3-9-008:001 Septic Tank File # 5324

Owner

Lot Location

Submit Plan 08/08/2003 Plan Approval 02/02/2003
IWS BPA
System Approved 09/16/2004 Last BPA 02/28/2005

Treatment Type / Disposal Via Septic tank
Use For Armony/etc
Designed By Toyota
Percolation Rate / Capacity 1 min/in / 3000 gallons

For further information, you may call the Wastewater Branch engineer as listed:

[ ] Oahu: Johnny Ong, Wastewater Branch (808)586-4294 Fax 586-4300.
[ ] Maui: Roland Tejano, Maui District Health Office (808)984-8232 Fax 984-8237.
[ ] Kona: Dane Hiromasa, Kealakekua Health Center (808)322-1963 Fax 322-1511.
[ ] Hilo: Jerry Nunogawa, Hawaii District Health Office (808)933-0401 Fax 933-0400.
[ ] Kauai: Lori Vetter, Kauai District Health Office (808) 241-3323 Fax 241-3566.

cesspool faxes.wpd sam revised October 4, 2006
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 921
HONOLULU, HAWAII 96805

October 13, 2006

TO: Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
   Attention: Director's Office
   Harold Yee, Wastewater Branch
   Stuart Yamada, Safe Drinking Water Branch
   Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
   Puunene-Hawaiian Cement Well (Well No. 4926-02)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by November 15, 2006. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

C: ss
Attachment(s)

RESPONSE:

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

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 bacteria-logical and chemical presence before initiating such use. The owner is responsible for monitoring the water quality thereof. However, if future plans are made, another source is necessary 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 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).

No comments or objections.

Contact Person: Alec Wong
Signed: Alec Wong
Phone: 586-4309
Date: 10/3/06
The Department of Health, Clean Water Branch has the following comments:

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/er
October 13, 2006

TO: Russell Tsuji, Administrator
   Land Division

FROM: Dean A. Nakano, Acting Deputy Director
       Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Puunene-Hawaiian Cement Well (Well No. 4926-02) TMK: 3-3-008:031

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by November 15, 2006. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

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

RESPONSE:

[X] 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

[X] Other comments: State-owned land demised by GL No. 84-284a to Hawaiian Cement for quarry purposes.

Contact Person: Gary Martin

Phone: 587-0421

Signed: Gary Martin

Date: OCT 19 2006
October 13, 2006

Mr. Michael Robertson
Wailani Drilling, Inc.
P.O. Box 790299
Paia, HI 96799

Dear Mr. Robertson:

Well Construction/Pump Installation Permit Application for Well No. 4926-02

We acknowledge receipt, on September 27, 2006, of your completed Well Construction/Pump Installation permit application and filing fee for the Puunene-Hawaiian Cement Well (Well No. 4926-02). You can expect your application to be processed within ninety (90) days from this date.

For your information, the attached table describes the process, responsible parties, and deadline requirements for drilling or modifying a well and installing, modifying, or replacing a pump.

By this acceptance letter, we are also notifying the well operator/landowner that water may not be pumped for purposes other than testing until the certificate of well construction/pump installation completion letter is issued to the well operator and landowner. Additionally, the permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity. No certificate of pump installation will be issued until the Commission has determined that the pump capacity will not have adverse effects on the aquifer, other nearby wells, or streams. In other words, you may need to remove the pump and install a smaller pump at the Commission’s discretion before you can withdraw water for purposes other than testing.

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

Sincerely,

DEAN A. NAKANO
Acting Deputy Director

C: Hawaiian Cement
DLNR-Land Division
TO:       Honorable Chiyome L. Fukino, M.D., Director
         Department of Health
         Attention:   Director’s Office
                      Harold Yee, Wastewater Branch
                      Stuart Yamada, Safe Drinking Water Branch
                      Alec Wong, Clean Water Branch

FROM:    Peter T. Young, Chairperson
         Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Puunene-Hawaiian Cement Well (Well No. 4926-02)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by November 15, 2006. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

RESPONSE:

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

[ ] 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).

[ ] An NPDES permit is required.

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

[ ] In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

[ ] No comments/objections

Contact Person: ___________________________ Phone: ________________

Signed: ___________________________ Date: ________________
October 13, 2006

TO: Russell Tsuji, Administrator  
Land Division

FROM: Dean A. Nakano, Acting Deputy Director  
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
Puunene-Hawaiian Cement Well (Well No. 4926-02) TMK: 3-3-008:031

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. **Please respond by returning this cover memo form by November 15, 2006.** If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

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

RESPONSE:

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

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

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ___________________ Phone: ________________

Signed: ___________________ Date: ________________
October 13, 2006

TO: Melanie Chinen, Administrator
    Historic Preservation

FROM: Dean A. Nakano, Acting Deputy Director
    Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
        Puunene-Hawaiian Cement Well (Well No. 4926-02) TMK: 3-3-008:031

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by November 15, 2006. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application or request additional review time, please contact Charley Ice of the Commission staff at 587-0251. If you require additional information regarding specific information that can be provided by the applicant, please contact the applicant directly at the contact information provided on the application form.

CLASS
Attachment(s)

RESPONSE:

[ ] This is a [ ] public (county or state) project [ ] private project and [ ] will [ ] may disturb historic sites.

[ ] We concur that the work described under this permit will not disturb historic sites.

[ ] We do not concur that the work described under this permit will not disturb historic sites. We require the following for our concurrence:

Contact Person: ___________________________ Phone: ____________________

Signed: ___________________________ Date: _______________
October 13, 2006

Mr. Michael W. Foley, Director
Planning Department
County of Maui
250 South High Street
Wailuku, HI 96793

Dear Mr. Foley:

Special Management Area Use Permit Requirements for
Well Construction/Pump Installation Permit Application
Puunene-Hawaiian Cement Well (Well No. 4926-02)

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

We would appreciate your comments on the captioned application with regard to the SMA permitting requirements specific to your division. Please respond by returning this cover memo form by November 15, 2006. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

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

Sincerely,

DEAN A. NAKANO
Acting Deputy Director

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________ Phone: ____________________________

Signed: ____________________________ Date: ____________________________
October 13, 2006

Mr. George Tengan, Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, HI 96793

Dear Mr. Tengan:

Well Construction/Pump Installation Permit Application Review
Puunene-Hawaiian Cement Well (Well No. 4926-02)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application. If you have any comments on this application, please submit them by November 15, 2006. If we do not receive comments we will assume you have no comments.

If you have any questions about this permit application, please contact Charley Ice of the Commission staff at 587-0251.

Sincerely,

[Signature]

DEAN A. NAKANO
Acting Deputy Director

Cc:

FROM: CHARLEY
DATE: 3-Oct-06
SUSPENSE DATE: 10-Oct-06

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WELL NUMBER 4926-02

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ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated

1. TRANS. LETTER
2. PERMIT PROCESS TABLE
3. CWRM MAP
4. APPL. FORM (11 COPIES)
5. USGS MAPS (11 COPIES)
6. TAX MAPS (11 COPIES)
7. PARCEL OWNER VERIF.
8. CONTRACTOR VERIF.
9. ALL INFO FILLED IN
10. BACKGROUND CHECK
11. $25 FEE DEPOSIT SLIP
12. DHP/CDUP/SMA pre-screen

(SMA map printout http://gis.hicentral.com/website/parcelzoning/viewer.htm, or INGRID'S SMA/CD MAP)
(LUC map printout http://luc.state.hi.us/luc_maps.htm, or INGRID'S SMA/CD MAP)

FOLDER:

- MADE NEW FILE FOLDER, ATTACHED
- FILE FOLDER ALREADY MADE, IN FILE CABINET

INCOMPLETE ACTION DATES:

DATE | ACTION
-----|------
| Missing TMK and USGS quad location.

- follow up

03 Oct-06 Gary Martin says accept & route as usual — he’ll check it out
well number — recheck — OK? / Thanks: wellphys, modified
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REMARKS:  
LINE (1) Hualalai Salt #4  
LINE (2) Hawaiian Cement, TMK: 3-8-08:P1 & P31  
LINE (3) Chong-Tim Well  
LINE (4) R & R Well  
LINE (5)  
LINE (6)  
LINE (7)  
LINE (8)  
LINE (9)  
LINE (10)
**PROPOSED USE**

- **15. Municipal (water systems serving greater than 25 individuals or 15 service connections)**
- **16. Domestic**
- **TT. Industrial (describe)**
- **18. Irrigation (describe crop and no. of acres)**
- **19. Military (describe)**
- **20. Other (describe)**

**OTHER LEGAL REQUIREMENTS**

If required, Items 21. and 22. must be obtained before the Commission can legally issue a permit:

- **21. Conservation District Use Permit (CDUP)**
  - [ ] Acquired, CDUP # date approved
  - [ ] Not Required (attach documentation from OCD)
  - [ ] I have not checked with OCD about whether or not a CDUP is required. I understand that checking with OCD prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

- **22. Special Management Area Permit (SMAP)**
  - [ ] Acquired, SMAP # date approved
  - [ ] Not Required (attach documentation from applicable County agency)
  - [ ] I have not checked with the county about whether or not an SMAP Permit is required. I understand that checking with the County prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

- **23. Historic Preservation Division (HPD) of the Department of Land and Natural Resources**
  - [ ] I have consulted with the HPD regarding potential impacts of well construction activities on historic sites. I have attached applicable documentation from the HPD.
  - [ ] I have not consulted with the HPD regarding potential impacts of well construction activities on historic sites. I understand that checking with the HPD prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued. Additionally, the history of past land use is attached.
  - Additional remarks, explanations, etc. (attach additional sheet if more space is needed)

**NOTE:** Signing below indicates that the signatures understand and assert that the information provided is accurate and true to the best of their knowledge. Further, the signatures understand that upon permit approval: 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 60 days after the completion date of the permitted work; 3) in the event that the application is not completed correctly, any permit may be suspended until the items are brought into compliance, and any work done while the permit is in suspension may result in fines of up to $5000/day.

**24. WELL DRILLER** (must be filled out if application is for Well Construction)

- **License business name:**
  - [ ] C-57-2015
- **License No.:**
  - [ ] 91-256
- **P.O. Box:**
  - [ ] 781289
- **Address:**
  - [ ] 800 S KALUAU AVE, #204
- **Phone:**
  - [ ] 808-676-8748
- **Fax:**
  - [ ] 808-676-8747
- **Signature:**
  - [ ] Sano
- **Print:**
  - [ ] Sano
- **Date:**
  - [ ] 9/1/05

**25. PUMP INSTALLER** (must be filled out if application is for Pump Installation)

- **License business name:**
  - [ ] C-57/C-57/A License No.
- **License No.:**
  - [ ] 808-676-8748
- **Signature:**
  - [ ] Sano
- **Print:**
  - [ ] Sano
- **Date:**
  - [ ] 9/1/05

**Additional remarks, explanations, etc.** (attach additional sheet if more space is needed)

**NCP Application Form 05/12/2005**
PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Hole Diameter: 4.5 in.

Minimum of 2' Radius & 4' Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft).

Ground Elevation: 205 ft, msl*

Elevation at top of casing: 206 ft, msl*

Cement Grout: 205 ft (min. 70% of distance from ground elevation to top of water surface or 500 ft, whichever is less).

Central space between hole and casing (1.5" for positive displacement, 3" for other methods).

Total Depth: 25 ft

Rock or Gravel Packing:

- Material: Y
- Crushed Basalt
- Rounded Gravel

Estimated Water Level Elevation: 3.5 ft, msl*

**Solid Casing Material:**

- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 (or A606) □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one):
  □ ASTM A679 (production welds)
  □ ASTM A512 (mirror welds)
- ABS Plastic conforming to ASTM F490 and ASTM D1537: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D3241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Compliant Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

**Open Casing Material:**

- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 (or A606) □ Type E □ Type S □ Grade B □ Other
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  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

*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 report and referenced to a benchmark which has been established by a surveyor licensed by the State.

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

\[
\text{Bottom Elevation of Well Limit = (Water Elevation + 4.4 \times \text{Water Level Elevation})} \div 4
\]

Example: Estimated + 2 ft, Water Level Elev. = Bottom Elevation of Well Limit = \(2 - \frac{4.4 \times 2}{4}\) = 1.8 ft.

**Solid Casing Material:**

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