Mr. Ernest K. Dias  
Sunkiss Shrimp Co.  
c/o Ceatech Plantations, Inc.  
P.O. Box 1282  
7550 Kaumualii Highway  
Kekaha, HI 96752

Dear Mr. Dias:

Well Completion Report for Well No. 5844-06

We have received your Well Completion Report Part II for the Sunkiss Shrimp Well (Well No. 5844-06) and acknowledge that it is complete.

If you have any questions, please contact Lenore Nakama of the Commission staff at 587-0218 or toll-free at 274-3141, extension 70218.

Sincerely,

[Signature]

LINNEL T. NISHIOKA  
Deputy Director

LN:ss
NAME OF WELL: Sunkiss Well 5844-06
DATE OF TEST: November 25, 1997
DATE OF ANALYSIS: 27-Jun-00

<table>
<thead>
<tr>
<th>s(ft)</th>
<th>ds (ft)</th>
<th>GPM</th>
<th>s/Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.77</td>
<td>0.77</td>
<td>121</td>
<td>0.0064</td>
</tr>
<tr>
<td>2.46</td>
<td>1.69</td>
<td>225</td>
<td>0.0109</td>
</tr>
<tr>
<td>3.23</td>
<td>1.54</td>
<td>285</td>
<td>0.0113</td>
</tr>
<tr>
<td>4.31</td>
<td>2.77</td>
<td>330</td>
<td>0.0131</td>
</tr>
</tbody>
</table>

Regression Output:
- Constant = 0.003035 = b
- Std Err of Y Est = 0.00082
- R Squared = 0.945165
- No. of Observations = 4
- Degrees of Freedom = 2
- X Coefficient(s) = 3.08E-05 = c
- Std Err of Coef. = 5.24E-06

Drawdown(tot) = Drawdown(aq.) + Drawdown(well)

\[ s = bQ + cQ^2 \]

if \( Q = 330 \) gpm

\[ bQ = 1.001 \] calc. \( s = 4.350 \) ft.

\[ cQ^2 = 3.349 \] \( L = 39.68 \) PERCENT OF HEAD LOSS = LAMINAR FLOW

adjusted drawdown using \( L @ 330 \) gpm

1.71 ft.

Polubarinova-Kochina Eq

Adjusted "s" using constant "b"

<table>
<thead>
<tr>
<th>( b )</th>
<th>( c )</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.37</td>
<td>0.68</td>
</tr>
<tr>
<td>0.86</td>
<td>1.00</td>
</tr>
<tr>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

SPECIFIC CAPACITY \( Q/s = \) FOR ANY \( Q \)

\[ Q = 150 \text{ gpm} \]
\[ Q/s = 54 \text{ GAL/FT OF DD} \]

Notes: Thickness of aquifer is assumed to be: 205 ft.
Saline water well
WCR 2 Check for Well No. 5844-06 (survey to regulation memo)

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

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

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

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

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

2. **Pump Installation Check** Mitch Ohye (initial)
   - **Yes**
   - **No**
   - If no, describe deficiency

   - data complete
   - followed WCPI Stds
   - wellphys.dbf updated
   - welaplic.dbf updated

   OK (initial)
6/15/00

Mrs. Linnel Nishioka  
State of Hawaii  
Commission on Water Resources  
P.O. Box 621  
Honolulu Hawaii 96809

Dear Mrs. Nishioka,

Enclosed you will find an executed copy of our well completion report, part two, pump installation. Also included is our pump test result which summarizes well 5844-06.

An earlier survey done by Esaki surveying is also included. Please note that well 5844-06 was surveyed by Ceatech and not by Esaki. Hope you will find this acceptable. I apologize for letting this information slip by the way side. If I can be of any further assistance please don't hesitate to call me at 335-0077.

Aloha,

Landis Ignacio  
Vice-President
TO: Sunkiss Shrimp Ltd.

ATTENTION: Mr. Landis Ignacio
RE: ELEVATION
TMK: 1-2-02:22
KEKAHA, KAUAI, HAWAII

WE ARE SENDING YOU:

<table>
<thead>
<tr>
<th>QUANTITY</th>
<th>IDENT. NO.</th>
<th>DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>6/27/97</td>
<td>Drawing showing elevation of well/future pond site</td>
</tr>
</tbody>
</table>

THESE ARE TRANSMITTED as checked

- [ ] For approval
- [x] For your use
- [x] As requested
- [ ] For review and comment

- [ ] Approved
- [ ] Approved as noted
- [ ] Returned for corrections
- [ ] Other

- [ ] Resubmit copies for
- [ ] Submit copies for
- [ ] Return corrected prints

REMARKS

Copy to:  
Signed: [Signature] for Dennis Esaki
BM set e site - Spike in Power Pdr 28'R = 13.86'

(5844-01)

Elv of well (Top of PVC pipe) = 5.39'

5844-01

Elv of future pond site

(5844-06)

Elv of well (Top of PVC)

10.75'

(CREATESURVEY

ONLY)

HIGHWAY → KUAI

11.07' 10.67'

B C

10.43' 10.86'

A D

Note: Distance from well 5844-01
To well 5844-06 is approximately
25'.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
Pump Installation

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

1. State Well No.: 5844-06  Well Name: Sunkiss Shrimp  Island: Kauai
2. Address: Kekaha, Kauai  Tax Map Key: 1-2-02-22
3. Pump Installation Company: CEATECH USA
4. Date Pump Installed: 01/08/97
5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: BALDOR CENTRIFUGAL
   Rated Capacity: 150 gpm
   Motor Type, H.P., Voltage, rpm: 102SM, 3 HP, 230V 1ph, 3450 RPM
   Type of flow meter: Digital SADDLE which measures in gpm
6. Method of flow measurement:
   □ Flowmeter  Manufacturer MCT  Make — Size 2"
   □ Weir  □ Open Pipe  □ Orifice  □ Other*, explain below
   *attach schematic
7. Fill in the as-built section on the other side of this sheet.
8. Other remarks/comments:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

Pump installation Contractor (print) CEATECH USA  C-57/C-57a/A Lic. No. ________________
Signature ________________________________  Date ________________
Permittee (print) Same as Above
Signature ________________________________  Date 6/15/00
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 16.75 ft. mean sea level

Elevation of top of chase tube

Pump intake depth = 15 ft. (referenced to bench mark)

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

If airline installed, bottom of airline elevation = ___ ft. mean sea level

4" PVC Intake

4" PVC check valve
PUMP INSTALLATION PERMIT

Sunkiss Shrimp Well, Well No. 5844-06

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 Sunkiss Shrimp Well (Well No. 5844-06) at Kekaha, Kauai, TMX 1-2 02/22, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 200 gpm capacity, or less, pump in the well.

3. The permittee shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on an annual basis, on forms provided by the Chairperson (attached).

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

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

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

7. The pump installation permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97).

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

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

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

Date of Approval: January 20, 1998
Expiration Date: January 20, 2000

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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee's Signature: ___________________________ Date: 6/15/00
Printed Name: ___________________________
Installer’s Signature: ___________________________ License #: _______ Date: 
Printed Name: ___________________________
Firm or Title: V.P. CRESTECH USA

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

Attachments:
USGS
Department of Health/ Safe Drinking Water & Wastewater Branches
Kauai Department of Water Supply
State of Hawaii
MEMORANDUM

TO: Ernest Dias and Landis Ignacio
FROM: Tom Nance
SUBJECT: Pump Test Results For the Sunkiss Well, State No. 5844-06

This memo summarizes the completed well dimensions and pump test results. The borehole is 200 feet deep. There is 140 feet of 12-inch solid casing and 30 feet of 12-inch perforated casing. The lower 30-foot of the borehole has been left as open hole and the annulus is sealed with grout for the entire length of the solid casing.

A pump test of approximately 26 hours was run on November 25 to 28 using an engine-driven, end suction pump. The first two hours were used to obtain step-drawdown data points, establishing the well’s hydraulic performance. Figure 1 shows the recorded water level over this period. This information has been used to develop the performance curve on Figure 2. At about 250 GPM, drawdown in the well is approximately 2.6 feet.

The recorded water level before, during, and following the pump test is shown on Figure 3. The average pumping rate over the last 24 hours was 255 GPM. As the graph shows, the driller had some pump problems immediately after the step-drawdown portion of the test and two short-term inadvertent shutdowns. However, these are not significant enough to invalidate the test results. Tidal fluctuations in the well appear to be about 70 percent of the ocean’s tidal amplitude.

Conductivity and salinity of samples taken during the test are listed in Table 1. There was a very gradual decrease in salinity from 34.3 PPT at the start to 33.6 PPT at the end. A seawater sample from the shoreline tested at 34.0 PPT.

Recommendations and Conclusions

1. The completed well should be able to produce 250 GPM at a salinity of 33 PPT or greater indefinitely. The open annulus of your nearby well provides a pathway for lower salinity water in shallower strata to find its way to the new well. If the old well is going to be abandoned, its casing should be extracted and the borehole sealed.

2. Water Commission rules require that the Well Completion Report include an elevation benchmark established at the well by a licensed surveyor. You need to make sure that this is done.
Memo To: Ernest Dias and Landis Ignacio  
December 2, 1997 - 97TN-371  
Page two

3. Essentially all the well's yield is from the 12-foot thick stratum of clean coral from 148 to 160 feet below ground. If this layer is of similar thickness elsewhere, its yield will not be adequate for the desired high capacity production wells. We will have to drill deeper to intercept other clean coral layers.

4. The production wells need to be as close to the shoreline as possible since the chances of hitting clean coral layers are better there. Silts, clays, and other lagoonal-type deposits are more prevalent at inland locations. We need to work out the locations of the first two production wells with this in mind.

cc: Cliff Jamile

Attachments
Figure 2

Hydraulic Performance of Well 5844-06
Determined During the Step-Drawdown Testing
on November 25, 1997
Figure 1
Recorded Water Level During the Step-Drawdown Phase of the Pump Test
**Table 1**

Water Quality During the November 25-26, 1997 Pump Test

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Pumping Rate (GPM)</th>
<th>Temperature at Time of Measurement (°C)</th>
<th>Conductivity (micromhos)</th>
<th>Salinity (PPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 25</td>
<td>14:40</td>
<td>120</td>
<td>23.79</td>
<td>50,868</td>
<td>34.28</td>
</tr>
<tr>
<td></td>
<td>15:00</td>
<td>225</td>
<td>23.30</td>
<td>50,617</td>
<td>34.47</td>
</tr>
<tr>
<td></td>
<td>15:20</td>
<td>285</td>
<td>23.24</td>
<td>49,960</td>
<td>34.02</td>
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<td></td>
<td>15:40</td>
<td>330</td>
<td>23.29</td>
<td>49,936</td>
<td>33.95</td>
</tr>
<tr>
<td></td>
<td>16:00</td>
<td>280</td>
<td>23.32</td>
<td>49,932</td>
<td>33.93</td>
</tr>
<tr>
<td></td>
<td>22:00</td>
<td>284</td>
<td>23.33</td>
<td>49,748</td>
<td>33.79</td>
</tr>
<tr>
<td>Nov. 26</td>
<td>04:00</td>
<td>284</td>
<td>23.50</td>
<td>49,795</td>
<td>33.70</td>
</tr>
<tr>
<td></td>
<td>10:00</td>
<td>271</td>
<td>23.46</td>
<td>49,702</td>
<td>33.65</td>
</tr>
<tr>
<td></td>
<td>16:00</td>
<td>288</td>
<td>23.30</td>
<td>49,480</td>
<td>33.60</td>
</tr>
</tbody>
</table>

**Notes:**
1. All measurements made on November 30, 1997 in the TNWRE office using an Ocean Sensors OS-200 CTD.
2. A shoreline seawater sample collected at 14:00 on November 25 tested as follows:

   - Temp. 23.40°C
   - Cond. 50,142 μmhos
   - Salinity 34.03 PPT
Table 2

Driller’s Meter Readings During the Pump Test

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Meter Reading (Gallons)</th>
<th>Computed Flowrate (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 25</td>
<td>14:20</td>
<td>3,343,300</td>
<td>Start-Up</td>
</tr>
<tr>
<td></td>
<td>14:40</td>
<td>3,346,700</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15:00</td>
<td>3,350,050</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>15:20</td>
<td>3,355,750</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td>15:40</td>
<td>3,362,350</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td>16:00</td>
<td>3,367,700</td>
<td>330</td>
</tr>
<tr>
<td></td>
<td>16:20</td>
<td>3,373,100</td>
<td>260</td>
</tr>
<tr>
<td></td>
<td>17:20</td>
<td>3,379,250</td>
<td>270</td>
</tr>
<tr>
<td></td>
<td>18:20</td>
<td>3,392,450</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>19:20</td>
<td>3,408,300</td>
<td>220</td>
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<td>3,423,950</td>
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</tr>
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<td>22:20</td>
<td>3,455,600</td>
<td>264</td>
</tr>
<tr>
<td></td>
<td>23:20</td>
<td>3,471,450</td>
<td>264</td>
</tr>
<tr>
<td>Nov. 26</td>
<td>00:20</td>
<td>3,487,400</td>
<td></td>
</tr>
<tr>
<td></td>
<td>01:20</td>
<td>3,503,000</td>
<td>266</td>
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<tr>
<td></td>
<td>02:20</td>
<td>3,515,000</td>
<td>260</td>
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<tr>
<td></td>
<td>03:20</td>
<td>3,531,600</td>
<td>260</td>
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<tr>
<td></td>
<td>04:20</td>
<td>3,545,650</td>
<td>200</td>
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<tr>
<td></td>
<td>05:20</td>
<td>3,565,000</td>
<td>275</td>
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<td>06:20</td>
<td>3,581,500</td>
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<td>3,597,700</td>
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<td>08:20</td>
<td>3,613,800</td>
<td>270</td>
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<td>09:20</td>
<td>3,629,900</td>
<td>268</td>
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<td></td>
<td>10:20</td>
<td>3,646,200</td>
<td>268</td>
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<tr>
<td></td>
<td>11:20</td>
<td>3,662,350</td>
<td>271</td>
</tr>
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<td></td>
<td>12:20</td>
<td>3,678,500</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td>13:20</td>
<td>3,694,550</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td>14:20</td>
<td>3,710,550</td>
<td>267</td>
</tr>
<tr>
<td></td>
<td>15:20</td>
<td>3,726,550</td>
<td>267</td>
</tr>
<tr>
<td></td>
<td>16:00</td>
<td>3,737,200</td>
<td>266</td>
</tr>
</tbody>
</table>
We don't need an elevation survey, we need the completion report for the pump installation (WCR Part II). I contacted the permittee by telephone on 5/30/00 and he said he would send it in a few days. I'll give him another call to remind him and to clarify what we need. thanks

---

Date: 6/15/00 10:29 AM
Author: Linnel T Nishioka
Subject: Cetech, Sunkist well

I talked with someone from Cetech (?) or Ceatech, and he said he had received our letter and will fill out the paperwork. He said that his driller died in an unfortunate accident. He asked if he had to submit a new elevation survey. He said he had another one for a well that was right next door so they tried to do it themselves. I told him to send it in with the other paperwork and if we needed more we would let him know.

Didn't know the answer but does the elevation survey have to be done by a surveyor for each well? I wasn't sure what our requirement was. If it is then we may need to look at it because that seems to be the hang up on getting our reports on time because it is difficult to get a surveyor out to do the survey. A topic for a future discussion. Thanks,

Linnel

6/15/00 left message for Ernest diary that we still haven't received WCR II. Hold off sending written notice for 1 more week.
Did anyone request this information from DOA?

---------- Forwarded by Linnel T Nishioka/DLNR/StateHiUS on 05/19/2000 04:25 PM
----------

James J Nakatani
05/19/2000 03:57 PM

Sent by: Gayle M Nakamura

To: Linnel T Nishioka/DLNR/StateHiUS@StateHiUS
cc:

Subject: Sunkiss Shrimp Co., Kekaha, Kauai

Per your May 16th memo, contact numbers for Ernest Dias is as follows:

CEATECH PLANTATIONS
AIRPORT INDUSTRIAL PARK
3375 KOAPAKA ST., SUITE H402
HONOLULU, HI 96819
836-3707

ON KAUAIR
(808) 337-9238

I also faxed the letter to him so he should be getting back to us with the information.

5/30/00 called Ernest Dias. He will fax in WCR 2 in a few days. He said there was confusion because this well is located on land leased from DLNR & not DOA.
TO: Honorable James J. Nakatani, Chairperson
   Department of Agriculture

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

SUBJECT: Pump Installation by Sunkiss Shrimp Co., Ltd.
          Kekaha, Kauai, Hawaii, TMK 1-2-02:22

We are writing to request your assistance in obtaining information regarding a pump that was
installed in a salt-water well (Well No. 5844-06) constructed by Sunkiss Shrimp Co., Ltd.
(Sunkiss) on land that was set aside to the Department of Agriculture for the Kekaha Agricultural
Park (TMK 1-2-02:22). The phone number given in the pump installation permit application has
been disconnected. Directory assistance has no listing of any company by that name. Also,
directory assistance has no listing of any person by the name of Ernest Dias, our contact person
for Sunkiss.

Specifically, we are following up on Condition 5 of the pump installation permit that required
submittal of a Well Completion Report Part II (form attached) and an as-built sectional drawing
of the pump within sixty (60) days after completion of the work. We also are seeking a fully
executed copy of the pump installation permit (attached). The permit expired on January 20,
2000.

Please contact my deputy, Linnel Nishioka, at 587-0214 if there are any questions regarding this
request.

LN:ss
Attachment
Tracy Runnells Well Service Inc.
364-B Manono Street, Kailua, Hawaii 96734
Phone/Fax (808) 263-6055
Email runnkal@aol.com

Date: 5/4/00
To: CWRM

FACSIMILE TRANSMISSION

# of Pages to follow: 1

Attn: Lenore Nakama

Lenore,

I saw Mel of Mel's Waterworks last night. According to Mel he sold the pump on the following page to Arron of Impact Drilling. Arron had a nephew or some relation who has assumed the business since Arron Frandsons death. Mel also went on to say the pump he sold is no longer in use at Sunkist and a new pump was sold to Sunkist by CBC. Mel was called to help get the pumps running (both Arron's and CBC's) but was never Contracted to Install Any pumps by Sunkist.

Sunkist was drilled by an unlicensed (C-57) guy too! I suggest you get the story straight from the Owner or CBC. If Mel's is a straight story, "PHEW"

Good Luck, Tracy

EVERYBODY'S PASSING THE BUCK ON THIS ONE!

Contractors Lic.# 22281
Production & Injection Well Drilling, Testing, Permitting, Rehabilitation's & Abandonment's
**Quotation # 97-1230AF REVISED**

**Reference:**
- SUNKIST

**Conditions specified**
- QTY. 1 - SHALLOW WELL VERTICAL TURBINE PUMP
- 3000 GPM @ 50' TDH 1500 RPM
- 25' SETTING

<table>
<thead>
<tr>
<th>Qty</th>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SG10S-1 STD. CONSTR. OIL LUBE BOWL ASSY. WITH 12' THRD. SUCTION</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>12&quot; X 10' SUCTION PIPE WITH WELD-ON CONE STRAINER</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1 3/16&quot; X 2&quot; X 10' X 5' THRD. OIL LUBE COL. ASSY.</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1 3/16&quot; X 2&quot; X 10' X 20' THRD. OIL LUBE COL. ASSY.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3-750 CAST IRON DISCH. HEAD COMPLETE FOR OIL LUBE WITH OIL POT ASSY</td>
<td>$5,327.00</td>
</tr>
<tr>
<td></td>
<td>AND 10' 125# DISCH. FLANGE</td>
<td></td>
</tr>
</tbody>
</table>

- NET EACH
- SHIPMENT @ 3 TO 4 WEEKS

**Mel's quote from his supplier:**

11/18

Wouldn't last in salt water.

Oil Lube Line Shaft Pump

I saw engine driving pump when working at Pioneer Seed across Hwy.

**Quote expires:** 2/5/98 freight collect

**FOB Factory Firm Bid:**

**Date:** 1/6/98

**Quoted by:** ALFREDO Q. FUENTES

---

Above quote is based on information furnished by others. Quote covers these specifications only.

Simflo is not responsible for information not furnished or omitted by others.

Terms: Net 30 days after shipment from our factory. No exceptions. This offer is not assignable.
Mr. Ernest K. Dias  
Sunkiss Shrimp Co., Ltd.  
7 Waterfront Plaza, Suite 400  
500 Ala Moana Blvd.  
Honolulu, Hawaii 96813  

Dear Mr. Dias:

Pump Installation Permit  
Sunkiss Shrimp Well (Well No. 5844-06)

Enclosed are two (2) originals of your approved Pump Installation Permit for the captioned well(s) which authorizes 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 10:

Special Conditions

1. (NONE)

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

To validate your pump installation permit, please sign and have the contractor sign both permit originals and return one for our files.

A copy of the Well Completion Report (Part II) and a copy of your water use report form are enclosed for your use. Except for the monthly water use report form, please provide copies of all the information in this packet to your pump installation contractor.

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

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

Aloha,

MICHAEL D. WILSON  
Chairperson

Enclosures
PUMP INSTALLATION PERMIT

Sunkiss Shrimp Well, Well No. 5844-06

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 Sunkiss Shrimp Well (Well No. 5844-06) at Kekaha, Kauai, TMK 1-2-02:22, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 200 gpm capacity, or less, pump in the well.

3. The permittee shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on an annual basis, on forms provided by the Chairperson (attached).

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

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

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

7. The pump installation permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97).

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

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

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

Date of Approval: January 20, 1998
Expiration Date: January 20, 2000

Michael D. Wilson, 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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee’s Signature: ________________________________ Date: __________

Printed Name: ________________________________ Firm or Title: ________________________________

Installer’s Signature: ________________________________ License #: __________ Date: __________

Printed Name: ________________________________ Firm or Title: ________________________________

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

Attachments

C:
USGS
Department of Health/ Safe Drinking Water & Wastewater Branches
Kauai Department of Water Supply
State of Hawaii
Ms. Rae M. Loui - Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Ms. Loui:

Completion of Sunkiss Saltwater Well No. 5844-06 in Kekaha, Kauai

Enclosed is the as-built cross section drawing of Well No. 5844-06 requested by your staff. You will note that the uppermost nine feet of the annular space was not grouted. This was done in anticipation of constructing a 9-foot sump around the well so that it could be outfitted with an end suction pump.

Thank you for waiving the surveying requirement for the saltwater well. If you need any additional information, please feel free to call.

Sincerely,

Tom Nance

cc: Ernest Dias - CEATECH  
Landis Ignacio - Sunkiss

Enclosure
Mr. Michael D. Wilson - Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Well Completion Report For Sunkiss Shrimp Well,
State No. 5844-06, in Kekaha, Kauai

Enclosed are the Well Completion Report and pump test results for the development and testing of saltwater well No. 5844-06 on the Sunkiss Shrimp Company farm at Kekaha, Kauai. The well produces water with salinity of 34 PPT. Drawdown at 250 GPM is 2.6 feet.

The exact elevation of the well has not been surveyed yet. This information will be forwarded to you as soon as it is available. We expect to begin constructing the two CEATECH Plantation wells (Nos. 5945-01 & -02) in mid-January. Feel free to call if you have questions.

Sincerely,

Tom Nance

Enclosures

cc: Ernest Dias - CEATECH
    Landis Ignacio - Sunkiss
    Aaron Frandsen - Impact Well Drilling
**WELL COMPLETION REPORT**

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

---

1. **State Well No.:** 5844-06  
2. **Location/Address:** Kekaha, Kauai  
3. **Well Name:** Sunkiss Shrimp Well  
4. **Island:** Kauai  
5. **Tax Map Key:** 1-2-02:22

---

**PART I. WELL CONSTRUCTION REPORT**

<table>
<thead>
<tr>
<th>Drilling Company:</th>
<th><strong>Impact Well Drilling</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of driller who performed work:</td>
<td>Aaron Frandsen</td>
</tr>
<tr>
<td>Type of rig/construction:</td>
<td>Cable Tool</td>
</tr>
<tr>
<td>Date(s) Well Construction and pump tests (if any) completed:</td>
<td>Dec 3, 1997</td>
</tr>
<tr>
<td>GROUND ELEVATION (referenced to mean sea level, msl):</td>
<td>ft</td>
</tr>
<tr>
<td>Well Bench Mark (description/location):</td>
<td>Elevation(ft): ___</td>
</tr>
<tr>
<td>DRILLER'S LOG:</td>
<td>Please attach geologic log (if available or if required by permit)</td>
</tr>
<tr>
<td>Depths (ft.)</td>
<td>Rock Description, Water Level, Dates, etc.</td>
</tr>
<tr>
<td>0 to 18</td>
<td>Sand 9' 10/97</td>
</tr>
<tr>
<td>18 to 23</td>
<td>Coral 9' 10/97</td>
</tr>
<tr>
<td>23 to 33</td>
<td>Sand 9' 10/97</td>
</tr>
<tr>
<td>33 to 76</td>
<td>Sandy Clay 9' 10/97</td>
</tr>
<tr>
<td>Total depth of well below ground:</td>
<td>200 ft.</td>
</tr>
<tr>
<td>Hole size:</td>
<td>14 inch dia. from 0 ft. to 200 ft. below ground</td>
</tr>
<tr>
<td>Casing installed:</td>
<td>8 in. I.D. x 500 in. wall solid section to 140 ft. below ground</td>
</tr>
<tr>
<td>Annulus:</td>
<td>Grouted from 9 ft. below ground to 140 ft. below ground</td>
</tr>
<tr>
<td>Initial water level:</td>
<td>9 ft. below ground</td>
</tr>
<tr>
<td>Initial water level:</td>
<td>Date and time of measurement: 10/25/97 2:00PM</td>
</tr>
<tr>
<td>Initial temperature:</td>
<td>°F</td>
</tr>
<tr>
<td>Initial temperature:</td>
<td>Date and time of measurement:</td>
</tr>
<tr>
<td>PUMPING TESTS: Reference Point (R.P.) used:</td>
<td>which elevation is ___ ft.</td>
</tr>
<tr>
<td>(1) Step-Drawdown Test Date</td>
<td></td>
</tr>
<tr>
<td>Start water level</td>
<td>ft. below R.P.</td>
</tr>
<tr>
<td>End water level</td>
<td>ft. below R.P.</td>
</tr>
<tr>
<td>(2) Long-term Aquifer Test Date</td>
<td></td>
</tr>
<tr>
<td>Start water level</td>
<td>ft. below R.P.</td>
</tr>
<tr>
<td>End water level</td>
<td>ft. below R.P.</td>
</tr>
<tr>
<td>Aquifer Pump Test Procedures data &amp; graphs (1/9/96 LTAT Form) attached?</td>
<td>Yes No</td>
</tr>
<tr>
<td>As-built drawings attached?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Other remarks/comments:</td>
<td>(On back of this form)</td>
</tr>
</tbody>
</table>

---

**Well Drilling Contractor (print):** Aaron Frandsen  
**C-57 Lic. No.:** C-16550  
**Signature:** Aaron Frandsen  
**Date:** Dec 8, 1997

**Surveyor (print):**  
**Lic. No.:**  
**Signature:**  
**Date:**

**Applicant (print):** Ernest K. Dias  
**Signature:**  
**Date:** Dec 11, 1997
PART II.  (PERMANENT) PUMP INSTALLATION REPORT

20. Pump Installation Company: ____________________________
21. Name of person performing work: _______________________
22. Date Pump Installation Completed: ______________________
23. PUMP INSTALLATION:
   Pump Type, Make, Serial No.: ____________________________ Capacity: _______ gpm
   Motor type, H.P., Voltage, rpm: ____________________________
   Depth of Pump Intake Setting ________ ft. below ________, which elevation is ________ ft.
   Depth to bottom of airline ________ ft. below ________, which elevation is ________ ft.
   Pumping Head is ________ ft. Type of flow meter: ________ which measures in ________
24. As-built drawings attached attached?  __ Yes  __ No
25. Other remarks/comments: (See below)

Pump Installation Contractor (print) ____________________________ C-57 Lic. No. ____________________________
Signature ____________________________ Date ____________________________

Applicant (print) ____________________________
Signature ____________________________ Date ____________________________

8. (cont'd) DRILLER'S LOG (cont'd):
   Water Level Dates (ft.) Rock Description, Remarks, Dates (ft.) Water Level Depth (ft.) Rock Description, Remarks, Dates (ft.)
   Dates (ft.) Water Level Depth (ft.) Rock Description, Remarks,
   Water Level Dates (ft.) Rock Description, Remarks,

   WL

   10' 26 to 80 Soft broken Coral, water to______
   10' 80 to 90 Soft white Coral to______
   10' 90 to 99 Soft sandy Clay to______
   10' 94 to 110 Hard brown Coral, layers clay to______
   10' 110 to 148 Firm Coral, layers clay to______
   10' 148 to 180 Firm Coral with broken areas to______
   10' 180 to 200 Coral with Silty Clay to______

19. & 25. Remarks:
   ________________________________________________________________
MEMORANDUM

TO: File 97-45
FROM: Tom Nance
SUBJECT: Progress on the Sunkiss Shrimp Farm Well, State No. 5844-06

Attached are Impact Well Drilling's log of the 200-foot deep borehole and salinity and temperature profiles in the open borehole made on November 6th. At the depth of desirable salinity (i.e., below 120 feet into water where the salinity is about 34 PPT), the zone with good permeability is the 12-foot section from 148 to 160 feet (coral without silt or clay). A short pump test will be run in the open hole before installing the casing to ensure that there is adequate yield.

Attachments
SALINITY PROFILE
SK11697.Z

TEMPERATURE PROFILE
SK11697.Z

BOTTOM OF TEMPE R CLOSING

Sunkiss Shrimp Farm
Well 5844-06
November 6, 1997
### IMPACT WELL DRILLING

#### WELL LOG

#### SUNKISS WELL

<table>
<thead>
<tr>
<th>Depth</th>
<th>Formation</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-18</td>
<td>Sand</td>
<td>9'</td>
</tr>
<tr>
<td>18-23</td>
<td>Coral</td>
<td>X</td>
</tr>
<tr>
<td>23-55</td>
<td>Sand</td>
<td>X</td>
</tr>
<tr>
<td>55-76</td>
<td>Sandy clay with coral</td>
<td></td>
</tr>
<tr>
<td>76-80</td>
<td>Broken coral</td>
<td>X</td>
</tr>
<tr>
<td>80-90</td>
<td>Soft white coral</td>
<td>X</td>
</tr>
<tr>
<td>90-94</td>
<td>Soft sandy clay</td>
<td></td>
</tr>
<tr>
<td>94-110</td>
<td>Hard brown coral with layers of sticky clay</td>
<td></td>
</tr>
<tr>
<td>110-137</td>
<td>Coral and silty clay</td>
<td></td>
</tr>
<tr>
<td>137-140</td>
<td>Firm coral</td>
<td></td>
</tr>
<tr>
<td>140-148</td>
<td>Coral with pockets of tan clay</td>
<td></td>
</tr>
<tr>
<td>148-152</td>
<td>Firm coral cuttings clean, no clays</td>
<td>X</td>
</tr>
<tr>
<td>152-160</td>
<td>Coral with broken areas, still clean</td>
<td>X</td>
</tr>
<tr>
<td>160-190</td>
<td>Coral with silty tan clay</td>
<td></td>
</tr>
<tr>
<td>190-200</td>
<td>Coral with silty white clay and layers of sticky tan clay</td>
<td></td>
</tr>
</tbody>
</table>
December 10, 1997
97TN-388 (97-45)

Mr. Michael D. Wilson - Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Well Construction Permits For
Sunkiss Well 5844-06 and
Ceatech Plantation Wells 5945-01 & -02

Enclosed please find executed Well Construction Permits for Wells 5844-06 and 5945-01 and -02 in Kekaha, Kauai. The drilling contractor, Impact Well Drilling, has recently completed Sunkiss Well 5844-06. A Well Completion Report will be filed shortly. Work is scheduled to commence on Ceatech Wells 5945-01 and -02 in mid-January. Feel free to call if you have any questions.

Sincerely,

Tom Nance

cc: Ernest Dias

Enclosures
WELL CONSTRUCTION PERMIT

Sunkiss Shrimp Well, Well No. 5844-06

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 Sunkiss Shrimp Well (Well No. 5844-06) at Kekaha, Kauai, TMK 1-2-02:22, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences.

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

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

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

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and contact the Department’s Historic Preservation Division (587-0045) immediately.

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

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

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97).

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

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

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

Date of Approval: August 28, 1997
Expiration Date: August 28, 1999

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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee's Signature: ERNEST K. DIAS Date: 9/3/97
Printed Name: ERNEST K. DIAS Firm or Title: SR. VP/GEN. MGR for OPS

Driller's Signature: Glenn C. Frandsen License #: C-16550 Date: 10-30-97
Printed Name: AARON C. FRANDSEN Firm or Title: IMPACT WELL DRILLING

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

Attachment
  c: USGS
  Department of Health/ Safe Drinking Water, Wastewater, and Clean Water Branches
  Kauai Department of Water Supply
  State of Hawaii, Board of Land & Natural Resources
MEMORANDUM

TO:    File 97-45
    From: Tom Nance

SUBJECT: Open Hole Pump Test of Sunkiss Saltwater Well No. 5844-06

This memo summarizes results of an hour-long pump test in the open hole to determine the well's potential yield. An engine-driven, end suction pump with a 4-inch suction line to 140 feet below ground was used. Three pumping rates were tested with the following results:

<table>
<thead>
<tr>
<th>Flowrate (GPM)</th>
<th>Drawdown (Feet)</th>
<th>Water Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample Time</td>
<td>Salinity (PPT)</td>
</tr>
<tr>
<td>100</td>
<td>0.04</td>
<td>2:00</td>
</tr>
<tr>
<td>250</td>
<td>0.74</td>
<td>2:10</td>
</tr>
<tr>
<td>300</td>
<td>0.95</td>
<td>2:40</td>
</tr>
</tbody>
</table>

Notes:
1. Pump and suction line limited the maximum pumping rate to 300 GPM.
2. Salinities were determined with an OS-200 CTD in the TNWRE office.

Formations with yield occur from 76 to 90 feet (broken and soft white coral) and from 148 to 160 feet (depths relative to ground level). Based on the salinity profile of November 6th, salinity in these two zones are 8.5 and 34.0 PPT, respectively. If pumped water is a mix from these two zones, their relative contributions were as tallied below. Expectedly, as the pumping rate was increased, more water was drawn in from the upper zone.

<table>
<thead>
<tr>
<th>Flowrate (GPM)</th>
<th>Pumped Water Salinity (PPT)</th>
<th>Relative Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From 76 to 90 Ft. ( % )</td>
<td>From 148 to 160 Ft. ( % )</td>
</tr>
<tr>
<td>100</td>
<td>31.56</td>
<td>9.6</td>
</tr>
<tr>
<td>250</td>
<td>25.20</td>
<td>34.5</td>
</tr>
<tr>
<td>300</td>
<td>22.96</td>
<td>43.3</td>
</tr>
</tbody>
</table>

With casing installed and the annulus sealed with grout, all water will come from the lower, 148- to 160-foot zone. Based on the measured drawdowns and the relative contributions computed above, a drawdown of 2 to 3 feet when 250 GPM is drawn exclusively from the lower zone appears likely.

Enclosures
STEP-DRAWDOWN TEST
SUNKISS SALTWATER WELL
STATE NO. 5844-00
NOV. 10, 1987
(OPEN HOLE PUMP TEST)
MEMORANDUM

TO: File 97-45
FROM: Tom Nance
SUBJECT: Pump Test Results For the Sunkiss Well, State No. 5844-06

This memo summarizes the completed well dimensions and pump test results. The borehole is 200 feet deep. There is 140 feet of 12-inch solid casing and 30 feet of 12-inch perforated casing. The lower 30-foot of the borehole has been left as open hole and the annulus is sealed with grout for the entire length of the solid casing.

A pump test of approximately 26 hours was run on November 25 to 26 using an engine-driven, end suction pump. The first two hours were used to obtain step-drawdown data points, establishing the well's hydraulic performance. Figure 1 shows the recorded water level over this period. This information has been used to develop the performance curve on Figure 2. At about 250 GPM, drawdown in the well is approximately 2.6 feet.

The recorded water level before, during, and following the pump test is shown on Figure 3 (plots are to an arbitrary datum until the well is surveyed). The average pumping rate over the last 24 hours was 255 GPM. The driller had some pump problems immediately after the step-drawdown portion of the test and there also were two short-term inadvertent shutdowns. However, these are not significant enough to invalidate the test results. Tidal fluctuations in the well appear to be about 70 percent of the ocean's tidal amplitude.

Conductivity and salinity of samples taken during the test are listed in Table 1. There was a very gradual decrease in salinity from 34.3 PPT at the start to 33.6 PPT at the end. A seawater sample from the shoreline tested at 34.0 PPT.

Attachments
Figure 1
Recorded Water Level During the Step-Drawdown Phase of the Pump Test
Figure 2
Hydraulic Performance of Well 5844-06
Determined During the Step-Drawdown Testing
on November 25, 1997

\[ S = 3.218 \times 10^{-5} Q^2 + 2.442 \times 10^{-3} Q \]
\( r^2 = 0.9998 \)
Figure 3
Recorded Water Level Before, During, and Following the Pump Test, November 24-27, 1997
<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Pumping Rate (GPM)</th>
<th>Temperature at Time of Measurement (°C)</th>
<th>Conductivity (micromhos)</th>
<th>Salinity (PPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 25</td>
<td>14:40</td>
<td>120</td>
<td>23.79</td>
<td>50,868</td>
<td>34.28</td>
</tr>
<tr>
<td></td>
<td>15:00</td>
<td>225</td>
<td>23.30</td>
<td>50,617</td>
<td>34.47</td>
</tr>
<tr>
<td></td>
<td>15:20</td>
<td>285</td>
<td>23.24</td>
<td>49,960</td>
<td>34.02</td>
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<tr>
<td></td>
<td>15:40</td>
<td>330</td>
<td>23.29</td>
<td>49,936</td>
<td>33.96</td>
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<tr>
<td></td>
<td>16:00</td>
<td>260</td>
<td>23.32</td>
<td>49,932</td>
<td>33.93</td>
</tr>
<tr>
<td></td>
<td>22:00</td>
<td>264</td>
<td>23.33</td>
<td>49,748</td>
<td>33.79</td>
</tr>
<tr>
<td>Nov. 26</td>
<td>04:00</td>
<td>284</td>
<td>23.50</td>
<td>49,795</td>
<td>33.70</td>
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<tr>
<td></td>
<td>10:00</td>
<td>271</td>
<td>23.46</td>
<td>49,702</td>
<td>33.65</td>
</tr>
<tr>
<td></td>
<td>16:00</td>
<td>266</td>
<td>23.30</td>
<td>49,480</td>
<td>33.60</td>
</tr>
</tbody>
</table>

Notes:
1. All measurements made on November 30, 1997 in the TNWRE office using an Ocean Sensors OS-200 CTD.
2. A shoreline seawater sample collected at 14:00 on November 25 tested as follows:
   - Temp. 23.40°C
   - Cond. 50,142 μmhos
   - Salinity 34.03 PPT
Table 2
Driller's Meter Readings During the Pump Test

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Meter Reading (Gallons)</th>
<th>Computed Flowrate (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 25</td>
<td>14:20</td>
<td>3,343,300</td>
<td>Start-Up</td>
</tr>
<tr>
<td></td>
<td>14:40</td>
<td>3,345,700</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>15:00</td>
<td>3,350,050</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td>15:20</td>
<td>3,355,750</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td>15:40</td>
<td>3,362,350</td>
<td>330</td>
</tr>
<tr>
<td></td>
<td>16:00</td>
<td>3,367,700</td>
<td>260</td>
</tr>
<tr>
<td></td>
<td>16:20</td>
<td>3,373,100</td>
<td>270</td>
</tr>
<tr>
<td></td>
<td>17:20</td>
<td>3,379,250</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>18:20</td>
<td>3,392,450</td>
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<td>19:20</td>
<td>3,408,300</td>
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<td>20:20</td>
<td>3,423,950</td>
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<td>21:20</td>
<td>3,439,750</td>
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<tr>
<td></td>
<td>22:20</td>
<td>3,455,600</td>
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<tr>
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<td>23:20</td>
<td>3,471,450</td>
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</tr>
<tr>
<td>Nov. 26</td>
<td>00:20</td>
<td>3,487,400</td>
<td>265</td>
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<tr>
<td></td>
<td>01:20</td>
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<tr>
<td></td>
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<td>275</td>
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<tr>
<td></td>
<td>07:20</td>
<td>3,597,700</td>
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<td>08:20</td>
<td>3,613,800</td>
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<td>11:20</td>
<td>3,662,350</td>
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<td>12:20</td>
<td>3,678,500</td>
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<td></td>
<td>13:20</td>
<td>3,694,550</td>
<td>267</td>
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<td>14:20</td>
<td>3,710,550</td>
<td>267</td>
</tr>
<tr>
<td></td>
<td>15:20</td>
<td>3,726,550</td>
<td>267</td>
</tr>
<tr>
<td></td>
<td>16:00</td>
<td>3,737,200</td>
<td>268</td>
</tr>
</tbody>
</table>
Mr. Ernest K. Dias  
Sunkiss Shrimp Co., Ltd.  
7 Waterfront Plaza, Suite 400  
Ala Moana Blvd.  
Honolulu, Hawaii 96813

Dear Mr. Dias:

Well Construction Permit Applications for  
Ceatech Plantations Well Nos. 1 & 2  
Well Construction Permit for  
Sunkiss Shrimp Well (Well No. 5844-06)

We are sending you the review comments from the Land Division regarding your proposed well construction permits for the subject wells. Ceatech Well Nos. 1 & 2 are shown to be located on lands that were set aside to the Department of Agriculture (DOA) for the Kekaha Agricultural Park. As such, a letter of concurrence from DOA is required prior to issuance of the well construction permits. Please provide a copy of the letter of concurrence to our office, and we will continue to process the permit applications.

Because the Sunkiss Shrimp Well is shown to be located on lands that are leased to the Sunkiss Shrimp Company, we are able to complete the processing of the application. Enclosed are two (2) copies of your approved Well Construction Permit for the Sunkiss Shrimp Well which authorizes well construction activities but excludes installation work for your permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 12:

Special Conditions

1. The wall thickness of well casing shall be selected in accordance with good design practices applied with due consideration to conditions at the site of the well and shall be sufficient to withstand anticipated formation and hydrostatic pressures imposed on the casing during its installation, grouting, well development, and use.

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit. Please note that special conditions may simply highlight application deviations from the Standards.

The well owner is responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions.

To validate your permit, please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use. Please provide all the information in this packet to your well drilling contractor.

Also attached for your information is a copy of the Department of Health's review comments.

If you have any questions, please call the Commission staff at 587-0218 or toll-free at 274-3141, extension 70218.

Aloha,

MICHAEL D. WILSON  
Chairperson

Enclosures
WELL CONSTRUCTION PERMIT

Sunkiss Shrimp Well, Well No. 5844-06

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 Sunkiss Shrimp Well (Well No. 5844-06) at Kekaha, Kauai, TMK 1-2-02:22, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences.

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

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

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

5. If subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and contact the Department's Historic Preservation Division (587-0045) immediately.

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

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

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97).

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

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

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

Date of Approval: August 28, 1997
Expiration Date: August 28, 1999

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. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day.

Permittee's Signature: ___________________________ Date: __________

Printed Name: ___________________________ Firm or Title: ___________________________

Driller's Signature: ___________________________ License #: __________ Date: __________

Printed Name: ___________________________ Firm or Title: ___________________________

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

Attachment

C: USGS
Department of Health/Safe Drinking Water, Wastewater, and Clean Water Branches
Kauai Department of Water Supply
State of Hawaii, Board of Land & Natural Resources
Well No. 5844-06
Well Name Sunkiss Shrimp
Applicant State of Hawaii
Date of Review 8/27/97
Reviewer LN

SECTION 1: WELL LOCATION INFORMATION

Island KAUAI
Aquifer System WAIMEA
Aquifer Sector KEKAHA

Proposed Use Proposed Withdrawal System Sustainable Yield
#VALUE! 200000 12

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

| Elevation at top of casing | ft., m.s.l. |
|--------------------------------|
| Ground Elevation | ft., m.s.l. |
| Cement Grout | ft. |
| Rock Packing | ft. |
| Hole Diameter | in. |
| Total Depth | ft. |
| Estimated Head | ft., m.s.l. |
| Calculated Aquifer Thickness | 41 ft. |
| County Water Supply (Y/N ?) | N/A |

Solid Casing

| Material Designation | ft. |
|----------------------|
| Length | ft. |
| Diameter | in. |
| Wall Thickness | in. |

Casing

| Material Designation | ft. |
|----------------------|
| Length | ft. |
| Diameter | in. |
| Wall Thickness | in. |

Open Hole

| Length | ft. |
| Diameter | in. |

SECTION 3: CHECKLIST  (values to check are shaded)

Well Depth

| Theoretical Thickness of Aquifer | 41 ft. |
|---------------------------------|
| 1/4 Aquifer Thickness | 10.25 ft. |

Depth of Well below Sea Level 188 ft. too deep (refer to HWCPIS Section 2.2)

Well Casing

<table>
<thead>
<tr>
<th>Minimum Wall Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material PVC</td>
</tr>
<tr>
<td>County or Non-County non-county</td>
</tr>
<tr>
<td>Minimum Thickness per standards</td>
</tr>
<tr>
<td>Wall Thickness Provided</td>
</tr>
</tbody>
</table>

Minimum Length of Solid Casing

| 90% of ground to top of aquifer | 9.9 ft. |
|---------------------------------|
| Length of solid casing Provided | 170 ft. okay (refer to HWCPIS Section 2.4 d) |
| Casing Material | Sch 80 okay (refer to HWCPIS Section 2.4 e) |

Annular Space

<table>
<thead>
<tr>
<th>Depth of Grouting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculated Depth of Grouting</td>
</tr>
<tr>
<td>Depth of Grouting provided</td>
</tr>
<tr>
<td>Thickness of Annular Space</td>
</tr>
</tbody>
</table>
Ref: LD-GM

MEMORANDUM:

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

FROM: Dean Y. Uchida, Administrator
       Land Division

SUBJECT: Application by Ceatech Plantations, Inc. for Well Construction Permits, Kekaha, Kauai, Tax Map Key: 1-2-02:1 and 22

We have reviewed the three (3) well construction permit applications referenced above and have the following comments:

The proposed wells, as shown on the maps provided by the applicant, are not located within the conservation district, and consequently, a conservation district use permit is not necessary.

Proposed wells 1 and 2 are shown to be on state-owned land under the operation of Governor’s Executive Order No. 3633 (copy attached) encumbering 164.353 acres that were set aside to the Department of Agriculture (DOA) for the Kekaha Agricultural Park. Therefore, approval of well sites 1 and 2 by DOA, and the governor’s concurrence will be necessary. A proposed third well is shown located on the premises demised under General Lease No. S-5367 to the Sunkiss Shrimp Company, Ltd., whose approval must also be obtained.

We believe the proposed wells, should they be located on state land, would be subject to the provisions of Chapter 343 relating to environmental impacts. Environmental assessments (copies available in our office) have been prepared in the past that cover all of the proposed well sites and includes some information related to well construction. However, they lack much of the information suggested in the guide for water well development projects (copy attached) prepared by the Office of Environmental Quality Control. Because the wells
are in close proximity to each other, one environmental assessment covering all three (3) wells should suffice in complying with Chapter 343 requirements.

If well construction permits are issued, please inform the applicant to contact our office to obtain the proper land tenure agreements prior to drilling the wells.

Affirming the state's ownership of the land on which the applicant proposes to locate the wells, we have routed the applications for permit to the Chairperson for his signature as you requested.

Should you have any questions, please contact Gary Martin at 70421.

Attachments

c: Kauai Land Board Member
  Kauai District Land Office
TO:  Mr. Michael D. Wilson, Chairperson  
        Board of Land and Natural Resources  

FROM:  Dean Uchida, Administrator  
        Land Division  

SUBJECT:  Request for Chairperson's Signature as Landowner  

As you know, each application for permits issued by the Commission on Water Resource Management requires the signature of the landowner of the property involved. On behalf of the applicant, may we have your signature on the attached permit applications which entail the use of State-owned land?

I have attested to the State's ownership of the property covered in the applications, as indicated below. Your signature would allow the permit applications to be filed and processed. It would not represent an endorsement of the applicant's proposal or an approval for the use of State land; both approvals would be sought by the applicant under separate actions later.

Please return this memo and the permit applications to the Water Commission when you're through.

Attach.

______________________________

AFFIRMATION

I hereby affirm that the State of Hawaii is the owner of that certain parcel of land identified as:

1-2-02:Por.1 (wells 1 & 2)  
TMK 1-2-02:22 located at Kekaha on the island of Kauai.

By ___________________________  
Land Division Administrator  

Dated AUG 22 1997
APPLICATION FOR PERMIT

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

APPLICATION FOR PERMIT

Well Construction or X Pump Installation

Instructions: Please print in ink or type, attach required maps, and send the completed application & two (2) copies to the Commission on Water Resource Management, P.O. Box 321, Honolulu, Hawaii 96809. This application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance in completing this application, please call the Commission's Regulation Branch at 587-0225.

1. APPLICANT: (circle primary contact[a], b, or c) Primary Fax: 537-1307
   (a) WELL OWNER
      Firm/Name Sunkiss Shrimp Co., Ltd.
      Contact Person Ernest K. Dias
      Address 500 Ala Moana Blvd., Honolulu, Hi 96813
   (b) LANDOWNER
      Firm/Name State of Hawaii
      Contact Person
      Address
   (c) CONTRACTOR
      Firm/Name to be competitively bid
      Contact Person
      Address

2. WELL LOCATION/NAME: Sunkiss Shrimp Co., Hatchery
   Island Kauai
   Address Kekaha, Hawaii
   Tax Map Key 1-2-02-21
   
   Attach the relevant portion of (a) a 7.5-Minute Series USGS topographic map (scale 1"=24,000), and (b) a property tax map, showing well location referenced to established property boundaries.

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

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

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

   Is this well a part of a battery of wells? Yes  No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: 200 gallons per minute
   
   Pump Type:
   - Deep Well Turbine
   - Rotary
   - Propeller
   - Submersible
   - Rotary-Displacement
   - Reciprocating
   - Gas
   - Centrifugal
   - Rotary-Gear
   - Impulse
   - Electric, rated horsepower: 5

   If Pump Replacement, Existing Pump Capacity: N/A
   gallons per minute

5. PROPOSED USE:
   - Municipal (including hotels, stores, etc.)
   - Industrial
   - Domestic (individual, noncommercial water sys.)
   - Dwelling Units
   - Irrigation (crop)
   - Acres
   - Other: Shrimp Farm Hatchery
   - Military

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: up to 200.00 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:

7. PENDING ACTIONS:
   - CUA
   - SMA
   - EIS
   - EA
   - NONE
   - Other(explain)

8. REMARKS, EXPLANATIONS: The well will produce saline water (30 PPT or greater) for use at the shrimp farm hatchery. The finished well depth will depend on salinity and yield.

   (if more space is needed, continue on back)

Well Owner Sunkiss Shrimp Co., Ltd Landowner State of Hawaii Contractor

Signature
Date 8-1-97

Signature
Date

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

Latitude
Longitude
Aquifer System Name
State Well No.

3 Jan 97 WCPIA Form

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

Elevation at top of casing: 14 ft., msl

Cement Grout: 165 ft.

Rock Packing: none

Hole Diameter: 14 in.

Total Depth: 200 ft.

Ground Elevation: 12 ft., msl

Solid Casing: Schedule 80 PVC

<table>
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<tr>
<th>Material</th>
<th>Length (ft)</th>
<th>Diameter (in)</th>
<th>Wall thickness (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>170</td>
<td>8</td>
<td></td>
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</table>

Casing: Perforated

Screen: Schedule 80 PVC

<table>
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<th>Openings (sq. in.)</th>
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<tbody>
<tr>
<td></td>
<td>30</td>
<td>8</td>
<td>0.5</td>
<td>16.5</td>
</tr>
</tbody>
</table>

Open Hole: 0 ft.

<table>
<thead>
<tr>
<th>Diameter (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
TO: Honorable Lawrence Miike, Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson  
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
Sunkiss Shrimp (Well No. 5844-06)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by September 1, 1997.

Please find a map, attached, to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (serving 25 or more people at least 60 days per year or less 15 or more service connections) and shall 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.

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

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

[ ] No comments/objections

Contact Person: Bill Wong  
Phone: 878-4298  
Date: 8/1/97

Signed: Bill Wong  
Phone: 878-4298  
Date: 8/1/97
TO: Honorable Lawrence Miike, Director
    Department of Health
    Attention: Dennis Tulang, Wastewater Branch
    William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson
      Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
          Sunkiss Shrimp (Well No. 5844-06)

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

We would appreciate your comments on the captioned application for any conflicts or
inconsistencies with the programs, plans, and objectives specific to your department. Please respond
by returning this cover memo form by September 1, 1997.

Please find a map, attached, to locate the proposed well. If you have any questions about this
permit application, request additional information, or request additional review time, please contact
Lenore Nakama of the Commission staff at 587-0218.

LN:ss
Attachment(s)

RESPONSE:

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

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

X [ ] No comments/objections

Contact Person: Lori N. Kajirrara
Signed: Michael D. Wilson
Phone: 587-4204
Date: 8-15-97
Mr. Ernest K. Dias  
Sunkiss Shrimp Co., Ltd.  
7 Waterfront Plaza, Suite 400  
500 Ala Moana Blvd.  
Honolulu, HI 96813  

Dear Mr. Dias:

Well Construction / Pump Installation Permit Applications for  
Well Nos. 5844-06 & 5945-01, 02

We have received your well construction permit applications and filing fees for the Sunkiss Shrimp Well (Well No. 5844-06) and the Ceatech Well Nos. 1 & 2 (Well Nos. 5945-01 & 02). By an August 6, 1997 telephone conversation with Ron Bailey, the applications have been amended to indicate that you are also applying for a pump installation permit. Applying for a pump installation permit on the same application will expedite the permitting process for your well development project.

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

We have forwarded the applications to the Chairperson of the Department of Land and Natural Resources for his signature as landowner at the proposed water source. Upon receipt of the signed applications, we will continue processing the applications.

Lastly, we note that you have not yet selected a contractor to do the work. Be advised that Section 1.6 of the Hawaii Well Construction & Pump Installation Standards (January 1977) states:

"All work required in the construction, modification, or sealing of wells shall be performed by well drillers (with a C-57 license) or general contractors (with a C license) licensed by the Hawaii Department of Commerce and Consumer Affairs, Division of Professional and Vocational Licensing."
All work required in the installation of pumps and pumping equipment shall be performed by well drillers with a C-57 license, pump installers with a C-57a license, or general contractors with an A license.

Upon receipt of the landowners signature on the applications, we will continue processing your applications without the contractor's signature; however, we will require your licensed contractor to sign the official permit document prior to beginning any work.

If you have any questions about your permit application, please contact Lenore Nakama of the Commission staff at 587-0218 or toll-free at 274-3141, extension 70218.

Sincerely,

RAE M. LOUI
Deputy Director

LN:ss
TO:        Honorable Lawrence Miike, Director  
           Department of Health  
           Attention:   Dennis Tulang, Wastewater Branch  
                         William Wong, Safe Drinking Water Branch  

FROM:       Michael D. Wilson, Chairperson  
             Commission on Water Resource Management  

SUBJECT:  Well Construction/Pump Installation Permit Application  
           Sunkiss Shrimp (Well No. 5844-06)  

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by September 1, 1997.

Please find a map, attached, to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

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

[ ] No comments/objections

Contact Person: _____________________________ Phone: _____________________________

Signed: __________________________________ Date: _____________________________
TO: Mr. Dean Uchida, Administrator  
Land Division

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

SUBJECT: Request for Chairperson’s Signature as Landowner

The attached original permit applications entail the use of State-owned land and, accordingly, requires the signature of the Chairperson as the landowner. Here, we are requesting your help in affirming the State’s ownership of the property and, thereafter, routing the applications to the Chairperson for his signature. (We have enclosed the appropriate transmittal memo that contains the affirmation statement.)

Please note that the Chairperson’s signature on the permit applications complete the applications and allow them to be accepted for processing by the Commission. The signature neither represents an endorsement of the applicant’s proposal nor an approval for the use of State land; both approvals would be sought by the applicant under separate actions later.

Please inform us if the proposed wells are in the Conservation District and, if so, whether the requirements of Chapter 343 have been met.

Lastly, please inform us of the contact person at Land Division who is responsible for transmitting the attached original applications to the Chairperson’s Office.

LN:ss
Attachments
<table>
<thead>
<tr>
<th>F</th>
<th>YR</th>
<th>APP</th>
<th>D</th>
<th>SRC/ OBJ</th>
<th>COST</th>
<th>PROJECT</th>
<th>PH ACT</th>
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**TOTAL** 75.00

**REMARKS:**
- **LINE (1)** Well No. 5844-06 (WCPA/PIPA)
- **LINE (2)** Well No. 5945-01, 02 (WCPA/PIPA)
- **LINE (3)**
- **LINE (4)**
APPLICATION FOR PERMIT

Well Construction or [ ] Pump Installation

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

APPLICATION FOR PERMIT

97-45
7-30-97

Instructions: Please print in ink or type, attach required maps, and send the completed application & two (2) copies to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. This application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance in completing this application, please call the Commission's Regulation Branch at 587-6235.

1. APPLICANT: (circle primary contact [a], [b], or [c]) Primary Fax: 537-1307
   (a) WELL OWNER
   FirmName: Sunkiss Shrimp Co., Ltd.
   Contact Person: Ernest K. Dias, Ph. 521-1801
   Address: Waterfront Plaza, Suite 400
            500 Ala Moana Blvd., Honolulu, HI 96813
   (b) LANDOWNER
   FirmName: State of Hawaii
   Contact Person: Ph.
   Address

2. WELL LOCATION/NAME: Sunkiss Shrimp Co., Hatchery
   Island: Kauai
   Address: Kekaha, Hawaii
   Tax Map Key: 1-2-02-22
   Attach the relevant portion of (a) a 7.5-Minute Series USGS topographic map (scale 1"=24,000), and (b) a property tax map, showing well location referenced to established property boundaries.

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

4. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 200 gallons per minute
   Pump Type:
   [ ] Deep Well Turbine [ ] Rotary [ ] Propeller [ ] Diesel
   [ ] Submersible [ ] Rotary-Displacement [ ] Reciprocating [ ] Gas
   [ ] Centrifugal [ ] Rotary-Gear [ ] Impulse [ ] Electric, rated horsepower: 5
   If Pump Replacement, Existing Pump Capacity: N/A gallons per minute

5. PROPOSED USE:
   [ ] Municipal (including hotels, stores, etc.)
   [ ] Industrial
   [ ] Domestic (individual, noncommercial water sys.)
   [ ] Dwelling Units
   [ ] Irrigation (crop) [ ] Acres
   [ ] Other: Shrimp Farm Hatchery
   [ ] Military
   [ ] Other: ____________________

6. (a) PROPOSED AMOUNT OF WITHDRAWAL up to 200.00 gallons per day
   (b) METHOD OF FLOW MEASUREMENT: [ ] Flow-meter
   [ ] Open-pipe [ ] Orifice Plate [ ] weir
   Completion Date: ____________________

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

8. REMARKS, EXPLANATIONS: The well will produce saline water (30 PPT or greater)
   for use at the shrimp farm hatchery. The finished well depth will depend on
   salinity and yield.

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

[Signature]
[Signature]
Well Owner: Sunkiss Shrimp Co., Ltd. Landowner: State of Hawaii

Contractor

For Official Use Only:
Date Received ____________________
Date Accepted ____________________
Field Checked By ____________________
Date ____________________
Longitude ____________________
Latitude ____________________
Aquifer System Name: KCLvA / WAME
State Well No. ____________________
3 Jan 97 WCPR Form
9. PROPOSED WELL SECTION

Elevation at top of casing
14 ft., msl.

Cement Grout: 165 ft.

Rock Packing: none ft.

Hole Diameter: 14 in.

Total Depth: 200 ft.

Ground Elevation: 12 ft., msl*

Solid Casing: Schedule 80 PVC

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Casing: 

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Open Hole:

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<tr>
<td></td>
<td>0 ft.</td>
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</table>

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.