Hi Charley,
Happy Friday!
Hope you are having a wonderful day...
As part of final compliance for the above subdivision (File 2.2655), the SMA requires that a copy of the testing of the well is to be submitted to your office. Attached is the lab report for your information/records, etc.
Do you need to me to send a hard copy as well?
Have a great weekend...

michelle :) maliko cliffs - well 5620-04 lab report.pdf
Laboratory Report

for

Pural Water Specialty Company
1955 Vineyard
Wailuku, HI 96793
Attention: Eric Okazaki
Fax: 

Date of Issue
07/23/2010

DST: David S Tripp
Project Manager

Laboratory certifies that the test results meet all NELAC requirements unless noted in the Comments section or the Case Narrative. Following the cover page are Hits Reports, Comments, QC Summary, QC Report and Regulatory Forms. This report shall not be reproduced except in full, without the written approval of the laboratory.
The following samples were received from you on **July 15, 2010**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using MWH Laboratories.

<table>
<thead>
<tr>
<th>Sample #</th>
<th>Sample Id</th>
<th>Sample Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>201007150526</td>
<td>MALIKO CLIFFS WELL</td>
<td>14-Jul-2010 0830</td>
</tr>
</tbody>
</table>

**Test Description**

@504MOD -- EPA Method 504.1
**Chain of Custody Record**

**MWH Labs**

**Company/Agency Name:** 
Pura Water Specialty Co.

**Project Code:** 
Pural-Magi

**MWH Labs Client Code:** 
Pural-H1

**Sample Group:** 
Maliko Cliffs Well

**Sample Temp When Rec'd At Lab:** 
\( 25^\circ C \) (Compliance: 4 +/- 2°C)

**Condition of Blue Ice:** 
FROZEN

**Samples Checked Against COC By:**

**Samples Logged In By:**

**Sample Rec'd Day of Collection?** (Check for yes)

**Samples Rec'd**

**Compliance Samples**
- Requires state forms

**Non-Compliance Samples**

**Regulation Involved:**
(ep. SDWA, Phase V, NPDES, FDA...)

**Type of Samples (circle one):**
- ROUTINE
- SPECIF.
- CONFIRMATION

**See Attached Bottle Order for Analyses**

**List Analyses Required** (enter number of bottles sent for each test for each sample)

**Sampler Comments**

**Sample Date** | **Sample Time** | **Sample ID** | **Client Lab ID** | **Matrix** | **Field Test** | **Field Date** | **Test Result**
--- | --- | --- | --- | --- | --- | --- | ---
7/1/10 8pm | Maliko Cliffs Well | RGW | | | | | Cl2-ND

**Sampler Printed Name and Signature:**
Donato Pascone

**TAT Requested:**
rush by adv notice only

**STD** | 1 wk | 3 day | 2 day | 1 day
--- | --- | --- | --- | ---

**SIGNATURE** | **PRINT NAME** | **COMPANY/TITLE** | **DATE** | **TIME**
--- | --- | --- | --- | ---
Relinquished By: | Donato Pascone | Pura Water Specialty Co | 7/1/10 | 8pm

**FedEx Tracking Number:**
871503746844

**Phone:**

**Address:**

**Company:**

**Internal Billing Reference:**

**Matrix Types:**
- RSW = Raw Surface Water
- CLW = Chlor(am)inated Finished Water
- SEAW = Sea Water
- BW = Bottled Water
- SEAW = Sea Water
- SW = Storm Water
- SO = Soil
- SL = Sludge
- O = Other - Please Identify

**Matrix Types:**
- RGW = Raw Ground Water
- FW = Other Finished Water
- WW = Waste Water
- SW = Storm Water
- SL = Sludge
- O = Other - Please Identify

**C-O-CV**
**Bottle Order for**

**Pural Water Specialty Company**

**David S Trippe**
Your MWHL Project Manager

**Client Code**: PURAL-HI

**Project Code**: PURAL-MAUI Bottle Orders

**Group Name**: Maliko Cliffs Well

**PC# / Job#**: 

---

**Ship Sample Kits to**

Pural Water Specialty Company

1955 Vineyard

Wailuku, HI 96793

Attn: Efren Ugalino

Phone: 

Fax: 

**Send Report to**

Pural Water Specialty Company

1955 Vineyard

Wailuku, HI 96793

Attn: Eric Okazaki

Phone: 

Fax: 808-244-8878

---

<table>
<thead>
<tr>
<th># of Samples</th>
<th>Tests</th>
<th>Qcline#</th>
<th>Bottles - Qty for each sample, type &amp; preservative if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>44MOD</td>
<td>3 x 40ml amber glass vial</td>
<td>no preservative</td>
</tr>
</tbody>
</table>

**Comments**

Shipping: Please include extra ice for Hawaii, for delivery by July 7.
The Comments Report may be blank if there are no comments for this report.
<table>
<thead>
<tr>
<th>Analyzed</th>
<th>Analyte</th>
<th>Sample ID</th>
<th>Result</th>
<th>Federal MCL</th>
<th>Units</th>
<th>MRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/20/2010 14:42</td>
<td>1,2,3-Trichloropropane (TCP)</td>
<td>201007150526</td>
<td>0.13</td>
<td></td>
<td>ug/L</td>
<td>0.04</td>
</tr>
<tr>
<td>07/20/2010 14:42</td>
<td>Dibromochloropropane (DBCP)</td>
<td></td>
<td>0.036</td>
<td>0.2</td>
<td>ug/L</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Samples Received on: 07/15/2010
### Laboratory Data Report: 338460

**Samples Received on:**
07/15/2010

**Prepared**

**Analyzed**

**QC Ref #**

**Method**

**Analyte**

**Result**

**Units**

**MRL**

**Dilution**

**MALIKO CLIFFS WELL (201007150526)**

**Sampled on 07/14/2010 08:30**

<table>
<thead>
<tr>
<th>Prepared</th>
<th>Analyzed</th>
<th>QC Ref #</th>
<th>Method</th>
<th>Analyte</th>
<th>Result</th>
<th>Units</th>
<th>MRL</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/20/2010</td>
<td>07/20/2010</td>
<td>14:42</td>
<td>552080</td>
<td>(EPA 504.1)</td>
<td>0.13</td>
<td>ug/L</td>
<td>0.04</td>
<td>1</td>
</tr>
<tr>
<td>7/20/2010</td>
<td>07/20/2010</td>
<td>14:42</td>
<td>552080</td>
<td>(EPA 504.1)</td>
<td>0.036</td>
<td>ug/L</td>
<td>0.31</td>
<td>1</td>
</tr>
<tr>
<td>7/20/2010</td>
<td>07/20/2010</td>
<td>14:42</td>
<td>552080</td>
<td>(EPA 504.1)</td>
<td>ND</td>
<td>ug/L</td>
<td>0.31</td>
<td>1</td>
</tr>
<tr>
<td>7/20/2010</td>
<td>07/20/2010</td>
<td>14:42</td>
<td>552080</td>
<td>(EPA 504.1)</td>
<td>93</td>
<td>%</td>
<td></td>
<td>1</td>
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</tbody>
</table>

Rounding on totals after summation.

(c) - indicates calculated results
QC Ref # 562080 - EPA Method 504.1
201007150526 MALIKO CLIFFS WELL

Analysis Date: 07/20/2010

Analyzed by: RXZ
QC Report: 338460

<table>
<thead>
<tr>
<th>QC Type</th>
<th>Analyte</th>
<th>Native</th>
<th>Spiked</th>
<th>Recovered</th>
<th>Units</th>
<th>Yield (%)</th>
<th>Limits (%)</th>
<th>RPD%</th>
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</thead>
<tbody>
<tr>
<td>CCM</td>
<td>1,2,3-Trichloropropane</td>
<td>1.3</td>
<td>1.25</td>
<td></td>
<td>ug/L</td>
<td>100</td>
<td>(70-130)</td>
<td></td>
</tr>
<tr>
<td>DUP_201007190106</td>
<td>1,2,3-Trichloropropane</td>
<td>ND</td>
<td>&lt;0.1</td>
<td></td>
<td>ug/L</td>
<td>0.01</td>
<td>(0-20)</td>
<td></td>
</tr>
<tr>
<td>LCS2</td>
<td>1,2,3-Trichloropropane</td>
<td>1.3</td>
<td>0.911</td>
<td></td>
<td>ug/L</td>
<td>73</td>
<td>(70-130)</td>
<td></td>
</tr>
<tr>
<td>MBLK</td>
<td>1,2,3-Trichloropropane</td>
<td>ND</td>
<td>&lt;0.1</td>
<td></td>
<td>ug/L</td>
<td>0.01</td>
<td>(0-20)</td>
<td></td>
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<tr>
<td>MRLLW</td>
<td>1,2,3-Trichloropropane</td>
<td>0.04</td>
<td>0.0308</td>
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<td>ug/L</td>
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<td>1.3</td>
<td>0.773</td>
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<td>ug/L</td>
<td>62</td>
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<td>CCL</td>
<td>1,2-Dibromo-3-chloropropane</td>
<td>0.01</td>
<td>0.0095</td>
<td></td>
<td>ug/L</td>
<td>95</td>
<td>(60-140)</td>
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<td>CCCM</td>
<td>1,2-Dibromo-3-chloropropane</td>
<td>0.25</td>
<td>0.237</td>
<td></td>
<td>ug/L</td>
<td>95</td>
<td>(70-130)</td>
<td></td>
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<td>DUP_201007190106</td>
<td>1,2-Dibromo-3-chloropropane</td>
<td>ND</td>
<td>ND</td>
<td></td>
<td>ug/L</td>
<td>(0-20)</td>
<td></td>
<td></td>
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<tr>
<td>LCSZ</td>
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<td>0.25</td>
<td>0.198</td>
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<td>ug/L</td>
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<td>(70-130)</td>
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<td>1,2-Dibromo-3-chloropropane</td>
<td>&lt;0.1</td>
<td>&lt;0.1</td>
<td></td>
<td>ug/L</td>
<td>&lt;0.1</td>
<td>(0-20)</td>
<td></td>
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<tr>
<td>MRL_CHK</td>
<td>1,2-Dibromo-3-chloropropane</td>
<td>0.01</td>
<td>0.0092</td>
<td></td>
<td>ug/L</td>
<td>92</td>
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<td>0.153</td>
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<td>ug/L</td>
<td>61</td>
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</tr>
<tr>
<td>CCL</td>
<td>1,2-Dibromoethane</td>
<td>0.01</td>
<td>0.0097</td>
<td></td>
<td>ug/L</td>
<td>97</td>
<td>(60-140)</td>
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<td>CCCM</td>
<td>1,2-Dibromoethane</td>
<td>0.25</td>
<td>0.255</td>
<td></td>
<td>ug/L</td>
<td>102</td>
<td>(70-130)</td>
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<tr>
<td>DUP_201007190106</td>
<td>1,2-Dibromoethane</td>
<td>ND</td>
<td>ND</td>
<td></td>
<td>ug/L</td>
<td>(0-20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCSZ</td>
<td>1,2-Dibromoethane</td>
<td>0.25</td>
<td>0.221</td>
<td></td>
<td>ug/L</td>
<td>88</td>
<td>(70-130)</td>
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</tr>
<tr>
<td>MBLK</td>
<td>1,2-Dibromoethane</td>
<td>&lt;0.1</td>
<td>&lt;0.1</td>
<td></td>
<td>ug/L</td>
<td>&lt;0.1</td>
<td>(0-20)</td>
<td></td>
</tr>
<tr>
<td>MRL_CHK</td>
<td>1,2-Dibromoethane</td>
<td>0.01</td>
<td>0.0100</td>
<td></td>
<td>ug/L</td>
<td>100</td>
<td>(60-140)</td>
<td></td>
</tr>
<tr>
<td>MS_201007190106</td>
<td>1,2-Dibromoethane</td>
<td>ND</td>
<td>0.211</td>
<td></td>
<td>ug/L</td>
<td>84</td>
<td>(65-135)</td>
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</tr>
<tr>
<td>CCL</td>
<td>1,2-Dibromopropane (S)</td>
<td>98.1</td>
<td>%</td>
<td>98</td>
<td></td>
<td></td>
<td>(60-140)</td>
<td></td>
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<tr>
<td>CCCM</td>
<td>1,2-Dibromopropane (S)</td>
<td>102</td>
<td>%</td>
<td>102</td>
<td></td>
<td></td>
<td>(60-140)</td>
<td></td>
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<tr>
<td>DUP_201007190106</td>
<td>1,2-Dibromopropane (S)</td>
<td>97.6</td>
<td>%</td>
<td>98</td>
<td></td>
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<td>(60-140)</td>
<td></td>
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<tr>
<td>LCSZ</td>
<td>1,2-Dibromopropane (S)</td>
<td>114</td>
<td>%</td>
<td>114</td>
<td></td>
<td></td>
<td>(60-140)</td>
<td></td>
</tr>
<tr>
<td>MBLK</td>
<td>1,2-Dibromopropane (S)</td>
<td>95.3</td>
<td>%</td>
<td>95</td>
<td></td>
<td></td>
<td>(60-140)</td>
<td></td>
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<tr>
<td>MRL_CHK</td>
<td>1,2-Dibromopropane (S)</td>
<td>97.6</td>
<td>%</td>
<td>98</td>
<td></td>
<td></td>
<td>(60-140)</td>
<td></td>
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<tr>
<td>MRLLW</td>
<td>1,2-Dibromopropane (S)</td>
<td>99.0</td>
<td>%</td>
<td>99</td>
<td></td>
<td></td>
<td>(60-140)</td>
<td></td>
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<tr>
<td>MS_201007190106</td>
<td>1,2-Dibromopropane (S)</td>
<td>83.2</td>
<td>%</td>
<td>83</td>
<td></td>
<td></td>
<td>(60-140)</td>
<td></td>
</tr>
</tbody>
</table>

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by **Underline**.
Criteria for MS and Dup are advisory only, batch control is based on LCS or CCC. Criteria for duplicates are advisory only, unless otherwise specified in the method.
(S) indicates surrogate compound.
(I) indicates internal standard compound.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)
Dear Mr. Lewis:

Well Completion Report for Well No. 5620-04

We received your Well Completion Report Part II for the Pauwela-Lewis #2 (Well No. 5620-04) on August 1, 2001 and acknowledge that it is complete. This completes the permitting requirements for this well.

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

Sincerely,

LINNEL T. NISHIOKA
Deputy Director
Return Receipt Fax Memo

For: Charlie Ice

Charlie. Enclosed are the following items:

- WCR I for Pauwela-Lewis #1 5620-03 with: signed form
  - Drillers log form
  - Constant rate pump test
  - Well Survey
  - Color well diagram

- WCR I for Pauwela-Lewis #2 5620-04 with: signed form
  - Drillers log form
  - Constant rate pump test
  - Well Survey
  - Color well diagram

- PIP for Kihei Akahi well # 4327-07 with: signed form
  - WCR II and color well diagram

Water-level incorrectly calculated as 4.19'; correct WL is 3.94'
Rate not entered on form - calculated as av. 37.92 gpm

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at

From: Mike Robertson

My error in not catching this before: as w/ Maui Vista, I overlooked that we have no appl. for PIP. Please submit w/ fee.

Thank you:

Mike Robertson
1. **Pump Tests Check** (special condition of PIP? Yes/No) Glenn Bauer (initial if yes)  

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   

   **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:**  
   |     |     |                           |
   |     |     |                           |

   

2. **Pump Installation Check** Mitch Ohye (initial)  

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   

   data complete followed WCPI Stds well database updated  
   |     |     |                           |
   |     |     |                           |

   

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

4. Roy ________ (initial) check

5. Susan Subia ________ (initial) finalize

6. Linnel ________ (initial) signature

7. Charley/Lenore/Ryan File
Return Receipt Fax Memo

For: Charlie Ice

Charlie, Enclosed are the following items:

___ PIP WCR II for Well # 5517-02 Manawai-Papanui
___ PIP WCR II for Well # 5517-02 Pauwela-Lewis #1
___ PIP WCR II for Well # 5517-02 Pauwela-Lewis #2
___ Map for Lahaina Park Well Application

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at

From: Bill Steele
1. State Well No.: 5620-04  
Well Name: Pauwela-Lewis #2  
Island: Maui

2. Address: Hana Highway at Maliko Bay  
Tax Map Key: 2-7-4:28

3. Pump Installation Company: WALLANI DRILLING

4. Date Pump Installed: 1/31/01

5. PERMANENT PUMP INFORMATION

<table>
<thead>
<tr>
<th>Pump Type, Make, Serial No.</th>
<th>Rated Capacity</th>
<th>Motor Type, H.P., Voltage, rpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submersible, Grundfos</td>
<td>40 gpm</td>
<td>Franklin, 5 HP, 230 V, 3450</td>
</tr>
</tbody>
</table>

Type of flow meter: TURBINE which measures in GPM

6. Method of flow measurement:
   - Flowmeter
   - Manufacturer: Micrometer
   - Make: M-2
   - Size: 2"

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

8. Other remarks/comments:

   Pump rated 40 gpm @ 245 head actual gpm
   Actual gpm was 50 gpm with pump set @ 149.5 ft open pipe.

---

Pump Installation Contractor (print): MIKE ROBERTSON  
Signature: Mike Roberts  
Date: 7/12/01  
Lic. No.: 20115

Permittee (print): SKY LEWIS  
Signature: Sky Lewis  
Date: 6/28/01
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

- Survey was @ top of casing
  132.36 FT

- Bench mark (SLAB)
elevation surveyed to nearest 0.01 ft. = 131.86 ft. mean sea level

- 6-9620-04 PAUWELA LEWIS #2

- elevation of top of chase tube
  132.36 ft. mean sea level

- Pump intake depth = 149.5 ft.
  (referenced to bench mark)

- Chase tube depth = 148.5 ft.
  (referenced to bench mark)

- If airline installed, bottom of airline elevation = N/A ft. mean sea level
June 25, 2001

Mr. Sky Lewis
215 East Panana Place
Kihei, Maui, HI 96753

Dear Mr. Lewis:

Pump Installation Permit
Pauwela-Lewis #2 (Well No. 5620-04)

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, well operator, and/or well owner are responsible for all conditions of the permit. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign and have the contractor sign both permit originals and return one for our files. A copy of your water use report form is 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 - Parts I & II as complete.

If you have any questions, please call Charley Ice of the Commission staff at [number] or toll-free at [number] (Hawaii), [number] (Kauai), [number] (Maui), or [number] (Lanai & Molokai) extension 70251.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosure
c. Wailani Drilling Company
PUMP INSTALLATION PERMIT
Pauwela-Lewis #2, Well No. 5620-C

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 Pauwela-Lewis #2 (Well No. 5620-04) at Hana Highway at Maliko Bay, Maui, TMK 2-7-4:28, 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 40 gpm capacity, or less, pump in the well.

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

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

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

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

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

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

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

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

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

Date of Approval: May 15, 2001
Expiration Date: May 15, 2003
GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

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

Permittee's Signature: ___________________________ Date: ______________

Printed Name: ___________________________ Firm or Title: ___________________________

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

Printed Name: ___________________________ Firm or Title: ___________________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
June 25, 2001

Mr. Sky Lewis
215 East Panama Place
Kihei, Maui, HI 96753

Dear Mr. Lewis:

Pump Installation Permit
Pauwela-Lewis #2 (Well No. 5620-04)

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, well operator, and/or well owner are responsible for all conditions of the permit. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign and have the contractor sign both permit originals and return one for our files. A copy of your water use report form is 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 - Parts I & II as complete.

If you have any questions, please call Charley Ice of the Commission staff at [number] or toll-free at [number] (Hawaii), [number] (Kauai), [number] (Maul), or [number] (Lanai & Molokai) extension 70251.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosure

Wailani Drilling Company
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 Pauwela-Lewis #2 (Well No. 5620-04) at Hana Highway at Maiko Bay, Maui, TMK 2-7-28, subject to the Hawaii Well Construction & Pump Installation Standards (123/97) which include but are not limited to the following conditions:

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

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Permittee's Signature: Wailani Decie Date: 6/28/01
Printed Name: S. Lewis Firm or Title: Wailani Decie

Installer's Signature: Mike Robertson C-57, C-57a, or A License #: 20115 Date: 7/12/01
Printed Name: Wailani Decie Firm or Title: Wailani Decie

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
AMISSON ON WATER RESOURCE MANAGEME
ROUTE SLIP FOR PERMIT ISSUANCE

FROM: CHARLEY       DATE:  #Jun01       SUSPENSE DATE: ________________
TO: _______________  INIT. _______________  TO: _______________  INIT. _______________  FOR: _______________  PLEASE: _______________

BAUER, G. _______________ LUM, A. _______________ 3 Approval
CHING, F. _______________ NAKAMA, L. _______________ 3 Signature
FUJII, N. _______________ NAKANO, D. _______________ 4 Information
HARDY, R. _______________ 1 NISHIOKA, I. _______________ 1 Review & Comment
HIGA, D. _______________ 2 OHYE, M. _______________  Take Action
HIRANO, E. _______________ 3 SAKODA, E. _______________ 2 Type Final
ICE, C. _______________ 4 SUBIA, S. _______________ 5 File
IMATA, R. _______________ SWANSON, S. _______________ Xerox __________ copies
JINNAI, R. _______________ UYENO, D. _______________ 5
KUNIMURA, I. _______________ YODA, K. _______________

WELL NUMBER 5620-04    WELL NAME Panwela - Lewis #2

[ ] WELL CONSTRUCTION

ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 PUMP TEST
4 DOH COMMENTS
5 LAND DIV. COMMENTS
6 WCR FORM
7 USGS MAP
8 PARCEL CHECK
9 DATABASE PRINTOUT
10 WELL CHECK PRINT

[ ] PUMP INSTALLATION

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 DOH COMMENTS
4 LAND DIV. COMMENTS
5 WCR FORM
6 WUR FORM
7 USGS MAP
8 PARCEL CHECK
9 DATABASE PRINTOUT
10 GLENN'S WORKSHEET

processed together transmitted together, now separated into different folder to prevent confusion
MEMO and ROUTE SLIP

WCR 1 Check for Well No. 5620-03&04 (survey to regulation memo)

1. **Pump Tests Check**
   - Glenn Bauer (initial)
   - Step-Drawdown Test:
     - Followed WCPI Stds
     - Analysis attached
     - Proposed pump cap o.k.
     - Yes
     - No
   - Aquifer Pump Test:
     - Followed WCPI Stds
     - T & S analysis attached
     - Yes
     - No
   - Well Interference:
     - Estimated Steady-State
     - Drawdown at 1-mile radius is _________ ft.
     - Analysis attached
     - Yes
     - No
   - Stream Surface Water Impacted:
     - Yes
     - No

2. **Construction Check**
   - Mitch Ohye (initial)
   - Data complete
   - Followed WCPI Stds
   - Well database updated
   - Yes
   - No

3. Charley/Lenore/Ryan (initial) take action based on above analysis and double check with well check program again

4. Roy (initial) check

5. Susan Subia (initial) finalize

6. Linne (initial) signature

7. Charley/Lenore/Ryan File
Return Receipt Fax Memo

For: Charlie Ice

Charlie. Enclosed are the following items:

- WCR I for Pauwela-Lewis #1 5620-03 with: signed form
  - Driller's log form
  - Constant rate pump test
  - Well Survey
  - Color well diagram
  - WCR I for Pauwela-Lewis #2 5620-04 with: signed form
  - Driller's log form
  - Constant rate pump test
  - Well Survey
  - Color well diagram
- PIP for Kihei Akahi well # 4327-07 with: WCR II and color well diagram

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at [redacted]

From: Mike Robertson

My error in not catching fluid before: as w/ Maui Vista I overlooked that we have no appl. for PIP. Please submit w/ fee.

[redacted]

Thank you:
Mike Robertson
# WELL COMPLETION REPORT - PART I
## Well Construction

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 887-0225. For updates to this form or additional information, please visit our website at [http://www.state.hi.us/dlnr/cwrm](http://www.state.hi.us/dlnr/cwrm).

| 1. State Well No.: | 5620-04 | Well Name: | Rauwelua - Lewis #2 | Island: | Maui |
|-------------------|---------|------------|----------------------|---------|
| 2. Address:       | 553 Hana Hwy. | Paia, HI 96779 | Tax Map Key: | 2-7-4:28 |
| 3. Drilling Company: | Wailani Drilling |
| 4. If drilled, type of Rig: | □ Rotary | □ Percussion |
| 5. Date Well Construction (drilled, capped, grouted) completed: | 1/29/01 (Attach Driller's Log (7/26/99 DL Form)) |
| In addition to the driller's log, if a geologic log was prepared, please submit with this form. |
| 6. Initial water-level encountered: | 130 ft. below ground | Date and time of measurement: | 1/24/01 (month/day/year) |
| 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) |
| Parameters prior to pump test: |
| 9. Water-level: | 2.06 ft. above msil | Date and time of measurement: | 2/2/01 (month/day/year) |
| 10. Chloride: | 440 ppm | Date and time of sampling: | 2/2/01 (month/day/year) |
| 11. Temperature: | 68°F | Date and time of measurement: | 2/2/01 (month/day/year) |

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

13. Attach plot plan and surveyor's stamped elevation report.

14. 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.)

15. Remarks: **Benchmark - Top of Casing See Attached**

---

**Licensed Driller (print)** MIKE ROBERTSON

**Signature**

**C-57 Lic. No.** 20115

**Date** 4/20/01

**Surveyor (print)** BRUCE LEE

**Signature**

**L.P.L.S. Lic. No.** 5983-15

**Date** 4/20/01

**Permittee (print)** SKY LEWIS

**Signature**

**Date** 4/20/01
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 □ 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 □ 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
Benchmark (top of casing) is 132.36 ft above m.s.l.

Total Depth of Well 157.7 ft.
Initial Chlorides 440 ppm

Pumped tested at 40 gpm for 8 hours with maximum drawdown of 15.83 ft.

*Note: not drawn to scale
ELEVATION CERTIFICATE

April 19, 2001

WAILANI DRILLING COMPANY
655 Kulike Road
Haiku, Maui, Hawaii 96708

To Whom It May Concern:

On April 4, 2001, the well located on Parcel 28 of Tax Map Key: (2) 2-7-004 was surveyed by
surveyors under my instructions and the elevation at the top of the well casing was determined to be
132.36 Feet, Mean Sea Level. This elevation is based on an established benchmark referenced to a
Government Survey Station.

BRUCE R. LEE
LICENSED PROFESSIONAL LAND SURVEYOR
No. 5983-LS
HAWAII, U.S.A.

NEWCOMER-LEE
LAND SURVEYORS, INC.
A Hawaii Corporation

BRUCE R. LEE, President
Licensed Professional Land
Surveyor Certification No. 5983-LS
CONSTANT-RATE PUMP TEST DATA

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<th>Observation well no.</th>
<th>Pumped Well Name</th>
<th>Observation Well Name</th>
<th>Distance between Obs. &amp; Pumped Well</th>
<th>Target Q</th>
<th>Reference pt. for depth to water</th>
<th>Static Water Level @ start of test</th>
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<td>132.36 ft. msl</td>
<td>130.30 ft. msl</td>
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Water level measurements by:  
☐ steel tape  ☐ pressure transducer  ☐ airline

START TEST  
Date: 2/2/01  Time of day: 8:00 Am  Ref. PT - TOP OF CASING

Flow Meter Reading  
Start: 0 gals

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<th>Actual elapsed time (min)</th>
<th>Depth to water (ft)</th>
<th>Drawdown (ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (mg/L)</th>
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Data in this table is for:  
☐ Pumped Well  ☐ Observation Well  ☐ Remarks
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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>
<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate (gpm)</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:

Chloride sampling required

Use same ending drawdown figure as start for recovery
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<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
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END TEST  Date: 2/2/01  Time of day: 4:00 PM

ADDITIONAL REMARKS:

Person in charge of pump test (print): Ron Peers

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.
Dear Charlie:

This is to provide written notice for starting work on the following well:

Pauwela-Lewis Well 2 Well No. 5620-04
Owner also wants to take advantage of the declaratory ruling # DEC-ADM98-G5 because proposed pumps are rated less than 70 g.p.m.
Enclosed are the signed well construction Permits.

Please fax a response to me to confirm.

Thank You:

Mike Robertson
dba Wailani Drilling Inc.

c.c. Sky Lewis, Nick Clemane
WELL NUMBER: **5620-04**

**DRILLER’S LOG (7/26/99 DL Form)**

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<th>Depths (ft.)</th>
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Remarks:
Wailani Drilling Inc. Lic.#C57-20115

Mike Robertson 655 Kulike Road Haiku, Maui, Hawaii 96708
Ph 808 572-2673 Fax 572-0925 Cellular

To: Charlie Ice
For: Water Resource Commission

Dear Charlie:

This is to provide written notice for starting work on the following well:

Pauwela-Lewis Well: 2. Well No. 5620-04
Owner also wants to take advantage of the declaratory ruling # DEC-ADM98-G5
because proposed pumps are rated less than 70 g.p.m.
Enclosed are the signed well construction Permits.

Please fax a response to me to confirm.

Thank You:

Mike Robertson
dba Wailani Drilling Inc.

c.c. Sky Lewis, Nick Clemance

This is fine; better to request at time of approval.
We would like to allow Glenn Bauer to view the pump tests. Please advise
if you have an estimated
date for that, so we can
arrange his flight.

Certified By The National Groundwater Association
WELL CONSTRUCTION PERMIT
Pauwela-Lewis Well 2, Well No. 5620-04

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 Pauwela-Lewis Well 2 (Well No. 5620-04) at Pauwela, Makawao, Maui, TMK 27-4-28, subject to the Hawaii Well Construction & Pump Installation Standards (123/92) 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 13-168-16, Hawaii Administrative Rules.

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, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

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

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

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

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established in-stream flow standards. This permit or the authorization to construct the well shall not constitute a determination of cumulative 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 drawings of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 25, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

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

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

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

Date of Approval: May 1, 2000
Expiration Date: May 1, 2002

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

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

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

Attachment
C USGS
Department of Health/ Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
To: Charlie Ice  
For: Water Resource Commission

Dear Charlie:

This is to provide written notice for starting work on the following wells:

Pauwela-Lewis Wells 1 and 2. Well No. 5620-03 and 5620-04
Owner also wants to take advantage of the declaratory ruling # DEC-ADM98-G5
because proposed pumps are rated less than 70 g.p.m.
Enclosed are the signed well construction Permits.

Please fax a response to me to confirm.

Thank You;
Mike Robertson
dba Wailani Drilling Inc.

IBM
Solutions for a small planet

c.c. Sky Lewis, Nick Clemance

Certified By The National Groundwater Association
Mr. Sky Lewis  
553 Hana Highway  
Paia, Hawaii 96779  

Dear Mr. Lewis:

Well Construction Permit  
Pauwela-Lewis Wells 1 & 2 (Well No. 5620-03 & 04)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that 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 13:

**Special Conditions**

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

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

3. The well casing shall meet the minimum thickness required in the Hawaii Well Construction and Pump Installation Standards (HWCPIS, January 1997).

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

"Permanent pump installation for capacities between 0-70 gpm and where the proposed use is for private individual needs in non-ground-water management areas may be allowed prior to the final pump installation permit issuance. When required as a condition of the well construction permit, subsequent pumping tests shall validate the acceptability of the permanent pump. The permanent pump installed prior to final pump installation permit issuance is subject to removal if the testing shows that a smaller pump is required to reduce the potential of affecting neighboring wells and localized upconing at the applicant's well."
If you qualify and wish to take advantage of this ruling, please include a written request to install the permanent pump prior to final pump installation permit issuance when you return to us your validated well construction permit.

Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use. Please be aware that your driller has some unfinished business with the Water Commission that must be resolved in order for us to accept his signature on a permit, and no work shall commence unless a copy of the permit has been returned fully signed by both permittee and driller.

IMPORTANT - Drilling work may not proceed without a validated permit returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions, starting from the date of this permit approval.

If you have any questions, please call the Commission staff at [redacted] or toll-free at [redacted] extension 70251.

Aloha,

W. Ray Hardy

In TIMOTHY E. JOHNS
Chairperson

Enclosures

c: Wailani Drilling Company
WELL CONSTRUCTION PERMIT
Pauwela-Lewis Well 1, Well No. 5620-03

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 Pauwela-Lewis Well 1 (Well No. 5620-03) at Pauwela, Makawao, Maui, TMK 2-7-4:23, subject to the Hawaii Well Construction & Pump Installaton Standards (1/23/97) which include but are not limited to the following conditions:

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

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

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

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

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

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

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

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 25, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

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

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

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

Date of Approval: May 1, 2000
Expiration Date: May 1, 2002

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

Permittee's Signature: __________________________ Date: __________________________

Printed Name: __________________________ Firm or Title: __________________________

Driller's Signature: __________________________ C-57 License #: __________________________ Date: __________________________

Printed Name: __________________________ Firm or Title: __________________________

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

Attachment
c USGS
Department of Health's Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
WELL CONSTRUCTION PERMIT
Pauwela-Lewis Well 2, Well No. 5620-04

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 Pauwela-Lewis Well 2 (Well No. 5620-04) at Pauwela, Makawao, Maui, TMK 2-7-4:28, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/67) which include but are not limited to the following conditions:

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

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

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

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

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

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

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

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 25, 1987; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of cause and good-faith performance. A request to extend the permit shall apply for a new permit, which shall be reviewed and approved by the Commission.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must submit the permit to the Chairperson, and retain for your records.

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

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

Date of Approval: May 1, 2000
Expiration Date: May 1, 2002

TIMOTHY B. JOHNS, Chairperson
Commission on Water Resource Management

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

Permittee's Signature: ___________________________ Date: _______________

Printed Name: ___________________________ Firm or Title: ___________________________

Driller's Signature: ___________________________ C-57 License #: ___________________________ Date: _______________

Printed Name: ___________________________ Firm or Title: ___________________________

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

Attachment:

USGS Department of Health/ Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
WELL CONSTRUCTION PERMIT
Pauwela-Lewis Well 2, Well No. 5620-04

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 Pauwela-Lewis Well 2 (Well No. 5620-04) at Pauwela, Makawao, Maui, TMK 2-7-4:28, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-188-15, Hawaii Administrative Rules.

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

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

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

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

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

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

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

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

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

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-188-12(f) prior to any well sealing or plugging work.

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

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

Date of Approval: May 1, 2000
Expiration Date: May 1, 2002

TIMOTHY P. JOHNS, Chairperson
Commission on Water Resource Management

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

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

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

Attachment

USGS Department of Health: Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply

C-57 License #: 20115 Date: 5/23/13

Driller's Signature: [Signature]
WELL CONSTRUCTION PERMIT
Pauwela-Lewis Well 2, Well No. 5620-04

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 Pauwela-Lewis Well 2 (Well No. 5620-04) at Pauwela, Makawao, Maui, 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 (Chairperson), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

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

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

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

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

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

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

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

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

Date of Approval: May 1, 2000
Expiration Date: May 1, 2002

Timothy E. Johns, Chairperson
Commission on Water Resource Management

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

Permittee's Signature: S.K. Lewis
Printed Name: S.K. Lewis Firm or Title: 407 Lewis Date: 3/20/00
Driller's Signature: Mike Robertson C-57 License #: 2015 Date: 3/1/00
Printed Name: Mike Robertson Firm or Title: 407 Lewis Date: 3/1/00

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
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<td>200</td>
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### SECTION 1: WELL LOCATION INFORMATION

<table>
<thead>
<tr>
<th>Island</th>
<th>MAUl</th>
<th>Proposed Use</th>
<th>Domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquifer System</td>
<td>CENTRAL</td>
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<td>Aquifer Sector</td>
<td>PAIA</td>
<td>System Sustainable Yield</td>
<td>8</td>
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### SECTION 2: WELL SECTION DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Isolation of casing</td>
<td></td>
</tr>
<tr>
<td>Ground Elevation</td>
<td></td>
</tr>
<tr>
<td>Cement Grout</td>
<td></td>
</tr>
<tr>
<td>Rock Packing</td>
<td></td>
</tr>
<tr>
<td>Hole Diameter</td>
<td></td>
</tr>
<tr>
<td>Total Depth</td>
<td></td>
</tr>
<tr>
<td>Estimated Head</td>
<td></td>
</tr>
<tr>
<td>Calculated Aquifer Thickness</td>
<td></td>
</tr>
<tr>
<td>County Water Supply (Y/N ?)</td>
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### SECTION 3: CHECKLIST

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Well Depth</td>
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</tr>
<tr>
<td>Theoretical Thickness of Aquifer</td>
<td></td>
</tr>
<tr>
<td>1/4 Aquifer Thickness</td>
<td></td>
</tr>
<tr>
<td>Depth of Well below Sea Level</td>
<td></td>
</tr>
<tr>
<td>Depth of Well below Sea Level</td>
<td></td>
</tr>
<tr>
<td>Depth of Well below Sea Level</td>
<td></td>
</tr>
<tr>
<td>too deep</td>
<td></td>
</tr>
<tr>
<td>(refer to HWCPIS Section 2.2)</td>
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</tr>
<tr>
<td>Well Casing</td>
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<td>Minimum Wall Thickness</td>
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</tr>
<tr>
<td>Material</td>
<td></td>
</tr>
<tr>
<td>County or Non-County</td>
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<tr>
<td>non-county</td>
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<td>Minimum Thickness per standards</td>
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<td>0.280 in.</td>
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</tr>
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<td>0.250 in.</td>
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<td>too small</td>
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<td>(refer to HWCPIS Section 2.4 c)</td>
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<td>Minimum Length of Solid Casing</td>
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</tr>
<tr>
<td>90% of ground to top of aquifer</td>
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<td>Length of solid casing Provided</td>
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<tr>
<td>148.5 ft.</td>
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</tr>
<tr>
<td>Length of solid casing Provided</td>
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<td>170 ft.</td>
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<tr>
<td>okay</td>
<td></td>
</tr>
<tr>
<td>(refer to HWCPIS Section 2.4 d)</td>
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</tr>
<tr>
<td>Casing Material</td>
<td></td>
</tr>
<tr>
<td>Sch 40</td>
<td></td>
</tr>
<tr>
<td>okay</td>
<td></td>
</tr>
<tr>
<td>(refer to HWCPIS Section 2.4 e)</td>
<td></td>
</tr>
<tr>
<td>Annular Space</td>
<td></td>
</tr>
<tr>
<td>Depth of Grouting</td>
<td></td>
</tr>
<tr>
<td>Calculated Depth of Grouting</td>
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<tr>
<td>115.5 ft.</td>
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<td>Depth of Grouting provided</td>
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<td>120 ft.</td>
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<tr>
<td>Thickness of Annular Space</td>
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<tr>
<td>3 in.</td>
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<tr>
<td>okay</td>
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<td>If the cell above reads #N/A, reference HWCPIS</td>
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<tr>
<td>Okay</td>
<td></td>
</tr>
<tr>
<td>(refer to HWCPIS Section 2.6 d)</td>
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</tr>
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</table>
The applicant correctly brought it to my attention that they are requesting to process (and paid for) 2 wells, on adjacent parcels. The applications are identical except for the last digit in the TMK.

I redirected the permit to May 1 from May 24 because, uncompleted, but have now changed that; does approval of the otherwise effective date.

Sorry for the confusion! Susan & I think we understand, if you’re not sure!
**SECTION 1: WELL LOCATION INFORMATION**

<table>
<thead>
<tr>
<th>Island</th>
<th>MAUl</th>
<th>Proposed Use</th>
<th>Domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquifer System</td>
<td>KOOLAU</td>
<td>Proposed Withdrawal</td>
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<td>Aquifer Sector</td>
<td>HAIKU</td>
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<td>31</td>
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**SECTION 2: WELL SECTION DATA** *(enter data in grey cells only)*

<table>
<thead>
<tr>
<th>Elevation at top of casing</th>
<th>Solid Casing</th>
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</thead>
<tbody>
<tr>
<td>Ground Elevation</td>
<td>Material</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>Designation</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>Length</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>Diameter</td>
</tr>
<tr>
<td>Total Depth</td>
<td>Wall Thickness</td>
</tr>
</tbody>
</table>

| Estimated Head             | Casing       |
|                            | Material     |
|                            | Designation  |
|                            | Length       |
|                            | Diameter     |
|                            | Wall Thickness |
|                            | Openings     |
|                            | Open Hole    |
|                            | Length       |
|                            | Diameter     |

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

| Well Depth | Theoretical Thickness of Aquifer | 123 ft. |
|           | 1/4 Aquifer Thickness            | 30.75 ft. |
|           | Depth of Well below Sea Level   | 60 ft.   |

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<thead>
<tr>
<th>Well Casing</th>
<th>Minimum Wall Thickness</th>
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<tr>
<td>Material</td>
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<td></td>
<td>Minimum Thickness per standards</td>
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<tr>
<td></td>
<td>Wall Thickness Provided</td>
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<table>
<thead>
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<th>Minimum Length of Solid Casing</th>
<th>90% of ground to top of aquifer</th>
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<tr>
<td>Casing Material</td>
<td>Sch 40</td>
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<tr>
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<td>Calculated Depth of Grouting</td>
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<td>Depth of Grouting provided</td>
</tr>
<tr>
<td></td>
<td>Thickness of Annular Space</td>
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</tbody>
</table>
TO: Honorable Bruce S. Anderson, Director
    Department of Health
    Attention: Dennis Tulang, Wastewater Branch
    William Wong, Safe Drinking Water Branch

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

SUBJECT: Well Construction/Pump Installation Permit Applications
          Pauwela-Lewis Well (Well No. 5620-03)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 17, 2000.

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

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-01.

[ ] 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: [Contact Information]
Phone: 686-4244

Signed: [Signature]
Date: 4-26-2000
TO:  Honorable Bruce S. Anderson, Director  
Department of Health  
Attention:  Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch

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

SUBJECT:  Well Construction/Pump Installation Permit Applications  
Pauwela-Lewis Well (Well No. 5620-03)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 17, 2000.

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

RESPONSE:

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

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

[1] If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow 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.

[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 [this is] is not located near the proposed well site (information attached).

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

[1] No comments/objections

Contact Person:  William Wong  
Phone:  586-4258

Signed:  William Wong  
Date:  04/26/00
Facsimile Request & Cover Sheet
Wastewater Branch
919 Ala Moana Blvd Room 309
Honolulu, HI 96814-4920

Date 4.25.2000
Total Pages 1

From: Lori Kajiwara, Wastewater Branch
Phone 586-4290
Fax
Email: LKAJIWARA@sha.health.state.hi.us

Subject: Request for Information
Do you have any IWS files or records for the following:

(2) 8 - 7 - 4 : 28 maliko lewis, hana huy, heina

Indicate if:
[ ] sewered
[ ] no record
[ ] cesspool
[ ] septic tank

record date:
submit date:
plan approval date:
inspection date:

[ ] aerobic unit
[ ] other

# of Bedrooms 3 bedrooms
TO: Dean Y. Uchida, Administrator  
Land Division

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

SUBJECT: Well Construction/Pump Installation Permit Applications  
Pauwela-Lewis Well (Well No. 5620-03)

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

We would appreciate your comments on the captioned with regard to the programs, plans, and objectives specific to your division. Specifically, Item 9 on the application has been added per your request concerning water lease/permits administered by your division. Please respond by returning this cover memo form by April 17, 2000.

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

RESPONSE:

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

XX 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

XX Other comments: Original source of title is Royal Grant 166 issued on July 21, 1849

Contact Person: Gary Martin  
Phone: [redacted]

Signed: [redacted]  
Date: APR 14 2000
Mr. Sky Lewis  
553 Hana Highway  
Paia, HI 96779  

Dear Mr. Lewis:  

Well Construction/Pump Installation Permit Application for  
Pauwela-Lewis Well (Well No. 5620-03)  

We acknowledge acceptance, March 29, 2000, of your completed well construction/pump installation permit application for the Pauwela-Lewis Well (Well No. 5620-03). You can expect your application to be processed within ninety (90) days from this date.  

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

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

Sincerely,  

LINNEL T. NISHIOKA  
Deputy Director  

Cl:ss  
c:  Wailani Drilling Inc.
TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch

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

SUBJECT: Well Construction/Pump Installation Permit Applications
Pauwela-Lewis Well (Well No. 5620-03)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 17, 2000.

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

RESPONSE:

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

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

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

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 (if any) is not located near the proposed well site (information attached)

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

No comments/objections

Contact Person: ___________________________ Phone: ___________________________
Signed: __________________________________ Date: ___________________________
TO: Dean Y. Uchida, Administrator
Land Division

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

SUBJECT: Well Construction/Pump Installation Permit Applications
Pauwela-Lewis Well (Well No. 5620-03)

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

We would appreciate your comments on the captioned with regard to the programs, plans, and objectives specific to your division. Specifically, Item 9 on the application has been added per your request concerning water lease/permits administered by your division. Please respond by returning this cover memo form by April 17, 2000.

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

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: ____________________________
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<th>DOCUMENT NO.</th>
<th>SRC/CTR</th>
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<th>NAME/DESCRIPTION (WANG INPUT)</th>
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<td>TOTAL 75.00</td>
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REMARKS:
LINE (1) Well No. 5620-03 (WCPA/PIPA)
LINE (2) Well No. 5523-01 (WCPA)
LINE (3) ___________________________
LINE (4) ___________________________
By my record, several outstanding permits await action, without violations; only the Aladitch well with conflicting pump setting depths is an outstanding issue and (M. Robertson has been informed); it already holds up another Aladitch project, the Nakama Kofiau application (8726-10). Pump setting resolved 29 March 8713-10 complete.

C: 870 876?
WELL & PUMP INFORMATION: (Please fill in the diagram on the back of this form.)

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. PROPOSED WORK: (Check all that apply)
- Drill New Well
- Deepen
- Install New Pump
- Modify Existing Well
- Redrill
- Modify Pump
- Abandon/Seal
- Replace Pump

* Well No: __________ Be sure to complete and submit well abandonment report upon completion of work.

4. CONSTRUCTION:
- Dug
- Bored
- Driven
- Drilled
- Radial

Is this well a part of a battery of wells?  Yes  No (Please describe.)

5. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 65 gallons per minute

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

Powered by:
- Electric, rated horsepower: 5
- Diesel
- Gas
- Peaked kW

6. PROPOSED USE: (Check all that apply)
- Municipal (including hotels, stores, etc.)
- Domestic (individual, noncommercial water system)
- Irrigation (crop)
- Industrial
- Military
- Other (explain):

No. of Dwelling Units: ______
No. of Acres: ______

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 12000 gallons per day

(b) METHOD OF FLOW MEASUREMENT:
- Flowmeter
- Orifice Plate
- Weir
- Open-Cut
- Office
- Other (explain)

OTHER IMPORTANT INFORMATION:

8. PENDING ACTIONS: CDUA  SMA  GES  EA  NONE  Other (explain)

Remarks, Explanations: Would like to combine well construction and permanent pump installation. Custardis is submitting 3 well caps in order to have the option of pulling on either lot - 23 or 28 but will sell only.

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 conclusive water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner: SKY LEWIS  Landowner: SKY LEWIS  Contractor: MIKE RABERSON
Signature: ______________________  Signature: ______________________  Signature: ______________________
Date: 1/19/99  Date: 1/19/99  Date: 1/16/99
11. PROPOSED WELL SECTION

Hole Diameter: \[ D \]

Minimum of 2 ft. Radius & 4" Thick Concrete Pad

Elevation at top of casing: \[ 77 \] ft. nsf

(Survey to nearest 0.01 ft.)

Cement Grout: \[ 1.50 \] ft.

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

Total Depth: \[ 20 \] ft.

Minimum annular space between hole and casing ≥ 3’

Rock or Gravel Packing: \[ 1/4 \] ft.

Material:
- Crushed Basefill
- Rounded Gravel

Water Level Elevation: \[ ? \] ft. nsf

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to assure that your construction plans are in compliance with all existing regulations.

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,Bottom Elevation of Well Limit = (Water Elevation - \( \frac{1}{4} \) Water Level Elevation)

Example: Estimated = 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = \( 2 \times \left( \frac{1}{4} \right) \) = 18.5 ft.

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

Solid Casing Material:
- Steel: compliant with (check one or more):
  - \( \text{ANSI/WWA C200} \)
  - \( \text{API Spec. 5L} \)
  - \( \text{ASTM A53} \)
  - \( \text{ASTM A139} \)
  - \( \text{Grade B} \)
  - \( \text{Other} \)

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

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):
- Schedule 40
- Schedule 80

Thermoset Plastic: (check one):
- Filament Wound Resin Pipe conforming to ASTM D2896
- Centrifugally Cast Resin Pipe conforming to ASTM D2897
- 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:
- Steel: compliant with (check one or more):
  - \( \text{ANSI/WWA C200} \)
  - \( \text{API Spec. 5L} \)
  - \( \text{ASTM A53} \)
  - \( \text{ASTM A139} \)

Stainless Steel:
- (check one):
  - \( \text{ASTM A409} \)
  - \( \text{ASTM A312} \)

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

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):
- Schedule 40
- Schedule 80

Thermoset Plastic: (check one):
- Filament Wound Resin Pipe conforming to ASTM D2896
- Centrifugally Cast Resin Pipe conforming to ASTM D2897
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- PTFE Fluorocarbon Tubing conforming to ASTM D3296
- FEP Fluorocarbon Tubing conforming to ASTM D3296

Ground Elevation: \[ 170 \] ft. nsf

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to assure that your construction plans are in compliance with all existing regulations.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

For Official Use Only:

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

1. (a) WELL OWNER: Sky Lewis  
   Contact Person: Same  
   Phone: 579-6275
   Mailing Address: 553 Hana Hwy. Paia HI. 96779
   Fax: 579-6273
   E-mail: ____________________________

(b) LAND OWNER: Same
   Phone: ____________________________
   Mailing Address: ____________________________

(c) CONTRACTOR: Maui Drilling Inc.
   Contact Person: Mike Robertson
   Phone: 572-8673
   Mailing Address: 685 Kulahiko Rd. Haiku HI. 96708
   Fax: 572-8935
   E-mail: ____________________________
   Lic #: C-57-20115

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

2. WELL LOCATION/NAME: Mafi ko - Lewis  
   Island: Maui
   Address: Hana Hwy. Haiku HI.
   Tax Map Key: 3-12-7-4-33
   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. PROPOSED WORK: (Check all that apply)
   ○ Drill New Well  
   ○ Deepen  
   ○ Install New Pump
   ○ Modify Existing Well  
   ○ Reroute  
   ○ Modify Pump
   ○ Abandon/Seal *  
   ○ Replace Pump
   * Well No: ____________________________ Be sure to complete and submit well abandonment report upon completion of work.

4. CONSTRUCTION:  
   ○ Rug  
   ○ Bore  
   ○ Driven  
   ○ Drilled  
   ○ Radial
   Is this well a part of a battery of wells?  
   Yes  
   No  
   (Please describe.)

5. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 65 gallons per minute
   Pump Type (Check one):  
   ○ Deep Well Turbine  
   ○ Rotary  
   ○ Centrifugal  
   ○ Submersible  
   ○ Rotary-Displacement  
   ○ Reciprocating  
   ○ Impulse  
   Powered by:  
   ○ Propeller  
   ○ Gas  
   ○ Propeller  
   ○ Diesel  
   ○ Electric, rated horsepower: 5

6. PROPOSED USE: (Check all that apply)
   ○ Municipal (including hotels, stores, etc.)  
   ○ Industrial  
   ○ Domestic (individual, noncommercial water system)  
   ○ Irrigation (crop)  
   ○ No. of Dwelling Units: ____________________________
   ○ No. of Acres: ____________________________
   ○ Military  
   ○ Other (explain): ____________________________

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 12000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:  
   ○ Floater  
   ○ Open-pipe  
   ○ Well  
   ○ Office  
   ○ Other (explain):

OTHER IMPORTANT INFORMATION:

8. PENDING ACTIONS:  
   ○ CIA  
   ○ DIA  
   ○ EIS  
   ○ EA  
   ○ NONE  
   ○ Other (explain):

9. REMARKS, EXPLANATIONS:  

I understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within 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 compliance with water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.
11. PROPOSED WELL SECTION

Hole Diameter: 12 in.

Minimum of 2' Radius & 4" Thick Concrete Pad

Ground Elevation: 1700 ft., mas

Minimum annular space between hole and casing ≥ 3'

Cement Grout: 1.50 ft.
(min. 70% of distance from ground elevation to top of water surface or 500 ft., whichever is less.)

Total Depth: 250 ft.

Minimum annular space between hole and casing ≥ 3'

Rock or Gravel Packing: 11/2 A ft.

Material: □ Crushed Basalt
□ Rounded Gravel

Water Level Elevation: ? ft., mas

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,
Bottom Elevation of Well Limit = (Water Elevation - 1/4 Water Level Elevation)

Example: Estimated = 2 ft. Water Level Elev. —> Bottom Elevation of Well Limit = (2 - 0.5) = 1.5 ft.

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

Solid Casing: [ ] 60 ft. (Ground Elev.-Water Level Elev.)
Material: □ PVC
□ Resin Pipe conforming to ASTM D2998
□ Fiber 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 D2298
□ FEP Fluorocarbon Tubing conforming to ASTM D2298

Open Casing: [ ] Perforated □ Screen
Material: □ PVC
□ Resin Pipe conforming to ASTM D2998
□ Fiber 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 D2298
□ FEP Fluorocarbon Tubing conforming to ASTM D2298

Open Hole: □ Cased with solid PVC screen slabs

Material: □ Fiber Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D2298
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D2298
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Hawaii Well Construction and Pump Installation Standards

To assure that your construction plans are in compliance with all existing regulations.

Solid Casing: [ ] 60 ft. (Ground Elev.-Water Level Elev.)
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