FILE CLOSED
8-13-97
SEE FOLDER FOR 1905-03, 17, 18
for wup info
MEMORANDUM FOR THE RECORD

FROM: Lenore

SUBJECT: BHP Refinery (Hawaiian Refinery) Well No. 1805-03 Minimum Chloride Standards

Chris Jansen called 8/13/97 re: our letter of 7/16/97 to establish minimum chloride standards. He said their well chlorides start out pretty good (~5,000 mg/l) then shoots up to just about sea water pretty quickly. Told him that, since their well is permitted for emergency fire use only (0.00 mgd allocation), no need respond to our letter.

See Ewa Caprock folder #4
for copy of 7/16/97 letter
Mr. Chris Jansen  
Hawaiian Refinery Inc.

Dear Mr. Jansen:

Warning of Potential Water Shortages  
Ewa Caprock Water Management Area

The Commission has recently approved additional temporary water use permits in the Ewa Caprock Water Management Area. As a part of these approvals, the Commission has directed staff to issue a formal warning of potential future ground water shortages in this water management area to all other existing water use permittees.

The reason for concern is that as urbanization continues to replace existing sugarcane, there is potential for the caprock water to increase beyond usable brackish limits unless the irrigation recharge supplied to the caprock by Oahu Sugar Company (OSCo.) is replaced by some other means. It is possible that by 1995, recharge from sugarcane irrigation may completely cease.

Staff is presently working on the Ewa Caprock Regional Plan which is, in part, an effort to bring about alternative sources to supply non-potable demands in the Ewa region. This effort is to supplement and provide a back-up non-potable source to the caprock aquifer. If you are interested in participating in this regional plan, please contact us.

Staff is also requesting all permittees, who have not done so already, to submit a water shortage plan. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Ewa Caprock Ground Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required by law to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submitting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please contact Roy Hardy at __________

Sincerely,

RAE M. LOUI  
Deputy Director

RH: ko
DECLARANT (FILE REF.): BHP PETROL

PRESENT: Leonard Young, M. Ohye

LOCATION: TMK 9-1-31:03 Campbell Industrial Park

SOURCE(S): Well 1805-03 (Caprock Source)

USE(S): Emergency fire protection, Hydro-static testing of storage tanks and pipelines.

FIELD NOTES:

SOURCE: BHP Petroleum is located at 91-325 Komohana St. in Campbell Industrial Park. Well 1805-03 was modified in July 1985. Work included removing and replacing a 20 inch dia. steel casing, 19' in depth and deepening well bore from 39'to 50'. Well is equipped with a Randolph vertical turbine pump model no. 250 G, 250 h.p., 1760 rpm, serial no. G050-C8500283. There was no reference to the pump capacity on the information plate attached to the pump. According to the water declaration the capacity should be 1500 gallons per minute. Well is not metered.

USE: Emergency fire protection is the primary use, however according to Leonard Young water is also used for Hydro-static testing of storage tanks and pipelines. Testing usually occurs once or twice a year. Well is pumped for 15 minutes once a week to keep diesel engine in working condition.

LOCATION: TMK: 9-1-31:03 GPS Latitude 21° 18' 22" Longitude 158° 05' 23"

OWNERSHIP: BHP Petroleum - formerly Hawaiian Independant Refinery, Inc.

CHLORIDES: 2700 ppm (initial) Data from water Declaration.
FIELD INSPECTION INFORMATION CHECKLIST (Ver 4/3/91)

PART I: USE OF WATER

Declarant's File Reference: BHP PETROL

1. Tax Map Key where the water is used: 9-1-31:03
   Does the declarant own this land? No (Campbell Estate)
   What is the water used for? Emergency fire protection, hydro-static testing of tanks and pipes.
   If for irrigation, how many acres are being irrigated? by crop type?
   If for livestock, how many and what kind?
   If for drinking, at how many houses?
   By how many people?

2. Is the quantity of water use being measured? No
   If yes, document the location of the measurement point and method of measurement; also get use records
   if these were not submitted previously.

3. If this person takes from a multi-user pipe or ditch system?

PART II: WATER SOURCE

Source/Well # 1805-03 Name: Firewell

1. Where does the water come from/what kind of source is this? Brackish Caprock

2. Show the source location on maps, determine latitude and longitude, and document the nature
   of source development by measurements, sketches, and photographs.
   How is the water taken? Randolph vertical turbine pump-250 h.p., 1760 rpm
   What is the capacity for taking (gpm)? 1500 gpm (according to water declaration)
   How often is it taken (used)? Emergencies, hydro-static testing of storage tanks and pipelines 1-2
   times a year.

3. Tax Map Key at the source: 9-1-31:03
   Determine declarant's relation to source.
   Does the declarant:
   1) Operate and maintain the source? Yes
   2) Own the land at the source? No
   3) Use the water from this source? Yes
   4) Own the land where the water is being used? No

4. Does anyone else also use water from this source? No
   If yes, is their use included in this user's declaration?
   Who are the other users? Did they file?

REMARKS: BHP Petroleum - formally Hawaiian independent Refinery.

VERIFIED BY: DATE:
REGISTRATION OF WELL
AND
DECLARATION OF WATER USE

INSTRUCTIONS: Please type or print. If information is not available or not readable, indicate on form. Fill out as completely as possible, sign, and file form with the Division of Water Resource Management, or call (808) 586-8531 for assistance.

BATTERY OF WELLS: For a battery of wells, on the surface, in a tunnel, or in a shaft, submit a registration form for each well together with a single map or plot plan showing layout of wells.

STATE WELL NO.: 1906-09
WELL NAME OR DESIGNATION: Barbers Point
ISLAND: OAHU

A. WELL OPERATOR
Firm name: Hawaiian Ind. Refining Inc.
Contact person: Leonard K. Young
Address: 800 Kapiolani Blvd., Honolulu, HI 96814

B. OWNER OF WELL SITE
Firm name: Hawaiian Independent Refining, Inc.
Contact person: Leonard K. Young
Address: 800 Kapiolani Blvd., Honolulu, HI 96814

C. WELL LOCATION
Tax Map Key: 9-1-31:3 Town, Place, District: Campbell Industrial Park
Attach USGS "Quad" map (scale 1:24,000), tax map, or other map showing the well location.

D. WELL DATA
For Drilled Wells, submit "as-built" drawing, driller's log, and pump test results, and complete items below. For Tunnels and Shafts, submit construction drawings, plot plan, or sketch map.
Ground elevation (Mean sea level): 10 ft.
Reference point (Used to measure depth to water): 0 ft.
Description: Topographic Map
Depth to water (Below reference point): 10 ft.
Maximum recorded chloride: 2,700 ppm
Minimum recorded chloride: N/A ppm
Maximum chloride in 1987: N/A ppm

E. INSTALLED PUMP DATA
Pump type: [ ] Vertical shaft [ ] Submersible [ ] Centrifugal [ ] Other (specify):
Power: [X] Diesel, 260 HP [ ] Gas, ___ HP [ ] Electric, ___ HP [ ] Other (specify):
Pump capacity: 1,500 gallons per minute
Pump installation contractor:

... (continued over)
NOTE: The purpose of the Declaration of Water Use is to obtain information necessary for the management of the State's water resources. The Declaration does not confer a legal right to water or its use.

Water use data are recorded: Daily Weekly Monthly

Other (describe): ____________________________

Method of measurement: Flow Meter Orifice

Other (describe): Rated pumping capacity x minutes used

Quantity of Use (Report metered or estimated monthly water use from the well described on the reverse side of this form, for the calendar years 1983 through 1987. For a battery of wells which are not individually metered, but which are connected to a single meter or other measuring device, report total use from the battery):

WATER USE, IN GALLONS x 1000

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<td>1,710</td>
<td>5,463</td>
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Minimum day's use: ___________ gallons  Maximum day's use: ___________ gallons
Typical times of usage: Once per week

Type of Use (check at category boxes that apply and provide additional information as indicated):

Category | Additional Information
---------|------------------------
Municipal (including resorts, hotels, businesses)
Domestic (systems serving 25 people or less)
Irrigation
Industrial
Manufacturing
Military
Other

Specify (livestock, aquaculture, etc.): ____________________________

I declare that the contents of the above Declaration of Water Use are, to the best of my knowledge and belief, true, correct, and complete.

Water User's Signature: ____________________________  Date: 5/12/89
Printed Name: Everett O. Lewis
Firm or Title (Well Operator, etc.): Vice President-Manufacturing
FROM: [Signature]  DATE: 3-9-93  FILE IN:  

TO: Y. SHIROMA  INIT:  
   F. Ching  
   R. Jinnai  
   M. Ohye  
   I. Kunimura  
   S. Swanson  
   R. Hardy  

PLease:  
   See Me  
   Call  
   Review & Comment  
   Take Action  
   Investigate & Report  
   Draft Reply  
   Acknowledge Receipt  
   Type Draft  
   Type Final  
   Xerox copies  

FOR YOUR:  
   Approval  
   Signature  
   Information  

REMARKS:  

BHP PETROLEUM  (FORMERLY HAWAIIAN IND. REF)  

FIELD MEMO - INVESTIGATED ON 3-4-93.  

NOTE: NEW MAKING NAME CHANGE FOR FILE REF.

FILE REF. TO READ:  BHP PETROL

WUP application filed under Hawaiian Ind Ref.
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

FIELD MEMORANDUM

DECLARANT (FILE REF.): BHP PETROL

PRESENT: Leonard Young, M. Ohye

LOCATION: TMK 9-1-31:03 Campbell Industrial Park

SOURCE(S): Well 1805-03 (Caprock Source)

USE(S): Emergency fire protection, Hydro-static testing of storage tanks and pipelines.

FIELD NOTES:

SOURCE: BHP Petroleum is located at 91-325 Komohana St. in Campbell Industrial Park. Well 1805-03 was modified in July 1985. Work included removing and replacing a 20 inch dia. steel casing, 19' in depth and deepening well bore from 39' to 50'. Well is equipped with a Randolph vertical turbine pump model no. 250 G, 250 h.p., 1760 rpm, serial no. G050-C8500283. There was no reference to the pump capacity on the information plate attached to the pump. According to the water declaration the capacity should be 1500 gallons per minute. Well is not metered.

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LOCATION: TMK: 9-1-31:03 GPS Latitude 21° 18' 22" Longitude 158° 05' 23"

OWNERSHIP: BHP Petroleum - formerly Hawaiian Independant Refmery, Inc.

CHLORIDES: 2700 ppm (initial) Data from water Declaration.
FIELD INSPECTION INFORMATION CHECKLIST  (Ver 4/3/91)

PART I: USE OF WATER  Declarant’s File Reference: BHP PETROL

1. Tax Map Key where the water is used: 9-1-31:03
   Does the declarant own this land? No (Campbell Estate)
   What is the water used for? Emergency fire protection, hydro-static testing of tanks and pipes.
   If for irrigation, how many acres are being irrigated? by crop type? NOT APPLICABLE
   If for livestock, how many and what kind?  NOT APPLICABLE
   If for drinking, at how many houses?  NOT APPLICABLE
   By how many people?  NOT APPLICABLE

3. Is the quantity of water use being measured? No
   If yes, document the location of the measurement point and method of measurement; also get use records
   if these were not submitted previously.

4. If this person takes from a multi-user pipe or ditch system?  NOT APPLICABLE

PART II: WATER SOURCE  Source/Well # 1805-03  Name: Firewall

1. Where does the water come from/what kind of source is this? Brackish Caprock

2. Show the source location on maps, determine latitude and longitude, and document the nature
   of source development by measurements, sketches, and photographs.
   How is the water taken? Randolph vertical turbine pump-250 h.p., 1760 rpm
   What is the capacity for taking (gpm)? 1500 gpm (according to water declaration)
   How often is it taken (used)? Emergencies, hydro-static testing of storage tanks and pipelines 1-2
   times a year.

3. Tax Map Key at the source: 9-1-31:03
   Determine declarant’s relation to source.
   Does the declarant:
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   2) Own the land at the source? No
   3) Use the water from this source? Yes
   4) Own the land where the water is being used? No

4. Does anyone else also use water from this source? No
   If yes, is their use included in this user’s declaration?
   Who are the other users? Did they file?  NOT APPLICABLE

REMARKS: BHP Petroleum - formally Hawaiian independent Refinery.

VERIFIED BY:   DATE: 3/4/95
July 24, 1985

Hawaiian Independent Refinery

Attention: Mr. William W. Mills

Project: Emergency Firewater Well, WW-1208
Contract ENG 1985-10

Gentleman:

Enclosed please find drawing and data for completion of Foundation International, Inc.'s scope of work at the above captioned location.

I) Existing Casing - Remove and Replaced

II) Well Shaft - Existing Well shaft open to 39'0 feet with approximately 2'0 feet of fragmented coral (fill)

III) Material Samples - samples were taken at 39'0 feet - fragmented coral (fill)
     43'0 feet - coral w/ clayey sand
     46'0 feet - coral w/ clayey sand
     50'0 feet - coral w/ clayey sand

IV) Water Samples -
    Not available due to heavy contamination of sand/silt as a result of redrilling of open shaft.

V) Advancement of shaft -
    Shaft was drilled to 45'0 feet and belled to 5'0 feet in diameter, due to high rate of sand/silt floatation in water shaft was advanced to 50'0 feet to allow for settlement of same without filling belled area.

VI) Pump Test -
    Pump test was completed with Gorman Rupp 6 inch pump with maximum 2800 GPM capacity.

VII) Results -
    Maximum draw down from elevation -12'0 to-15'0 feet during three separate pump test of 10 minutes each. At completion of each pump test, water level at elevation -12'0 feet or MSL within one minute of termination of pump test.
Remove and Replace

Existing 4" x 4" Steel Plate

Remove and Replace

Existing CS-24" Inch Casing x 6'0" FT.

Remove and Replace

Existing CS-20" Inch Casing x 19'0" FT.

45'0 FT.

5'0 Dia. Bell

5'0 FT.

24 Inch Dia. Shaft
Well 1805-03

Installed Randolph vertical turbine capacity 1500 gpm

Diesel engine Caterpillar ser. # 03210312
PERMIT
TO WITHDRAW AND USE GROUND WATER

Applicant: Hawaiian Independent Refinery, Inc.
Application Date: August 27, 1985
Address: [Redacted]

Ground Water Control Area: Pearl Harbor Subarea: Caprock

Well(s) Name: HIRI Well State Well No.(s): 1805-03
Amount of Withdrawal: (Average Annual) 0 (Max. Day) 1500 gpm
Beneficial Purpose of Withdrawal: Emergency fire fighting
Area or Projects Served: Facility at Campbell Industrial Park

The applicant is hereby granted a permit to withdraw and use ground water from the source identified above, in accordance with Chapter 177, HRS, Administrative Rule, Chapter 166 of Title 13; and the following:

General Conditions. (1) the water use authorized by this permit must be for the beneficial purpose described in this permit; (2) the use must not interfere substantially and materially with existing individual household uses, existing preserved uses, or existing permitted uses; (3) the use is subject to the shortage and emergency powers of the Board of Land and Natural Resources; (4) this permit may be suspended or revoked in accordance with Chapter 166 of Title 13; (5) the permit holder may be required to relinquish this permit at any time or specified time after issuance to the Board of Land and Natural Resources in accordance with Chapter 166 of Title 13; (6) an approved flowmeter(s) must be installed to measure withdrawals; and a record of the withdrawals must be kept and reported to the Department of Land and Natural Resources, Division of Water and Land Development, P.O. Box 373, Honolulu, Hawai‘i 96809, on a monthly basis.

Additional Conditions.

The term of this permit shall be twenty years from the date of issuance, subject to review and adjustment every five years.

The issuance of this permit was approved by the Board of Land and Natural Resources at its meeting on October 11, 1985

Chairperson of the Board
Date of Issuance: OCT 18 1985
Chairperson and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Hawaiian Independent Refinery, Inc. Water Use Permit Application, Pearl Harbor Ground Water Control Area, Oahu

Hawaiian Independent Refinery, Inc. (HIRI) has submitted a Water Use Permit application for an emergency fire fighting water supply well at its facility in Campbell Industrial Park. HIRI would pump up to 2.16 mgd (million gallons per day) of brackish caprock water from the Caprock Subarea of the Pearl Harbor Ground Water Control Area for emergency fire fighting only. Since the well will be only used in emergency situations, the average annual allocation will be zero. This well in the Caprock Subarea will not affect the Koolau and Waianae basal aquifers.

RECOMMENDATION:

That the Board approve the issuance of a Water Use Permit to Hawaiian Independent Refinery, Inc. to pump up to 2.16 mgd of brackish caprock water for emergency fire fighting, subject to any special conditions and applicable laws, rules and ordinances.

Respectfully submitted,

MANABU TAGOMORI
Manager-Chief Engineer

APPROVED FOR SUBMITTAL:

SUSUMU ONO, Chairperson

Approved by the Board of Land & Natural Resources at the meeting held on 10-11-85

ITEM D-4
September 9, 1985

Mr. Chris Jansen
Environmental Affairs Coordinator
Hawaiian Independent Refinery, Inc.

Dear Mr. Jansen:

This is to acknowledge receipt of your application for a Water Use Permit and filing fee for your emergency water supply well at Campbell Industrial Park.

My staff is processing the application and will call you if more information is needed or if there are any questions.

Sincerely,

[Signature]

MANABU TAGOMORI
Manager-Chief Engineer

ES:ko
DECLARANT (FILE REF.): BHP PETROL

PRESENT: Leonard Young, M. Ohye

LOCATION: TMK 9-1-31:03 Campbell Industrial Park

SOURCE(S): Well 1805-03 (Caprock Source)

USE(S): Emergency fire protection, Hydro-static testing of storage tanks and pipelines.

FIELD NOTES:

SOURCE: BHP Petroleum is located at 91-325 Komohana St. in Campbell Industrial Park. Well 1805-03 was modified in July 1985. Work included removing and replacing a 20 inch dia. steel casing, 19’ in depth and deepening well bore from 39’ to 50’. Well is equipped with a Randolph vertical turbine pump model no. 250 G, 250 h.p., 1760 rpm, serial no. G050-C8500283. There was no reference to the pump capacity on the information plate attached to the pump. According to the water declaration the capacity should be 1500 gallons per minute. Well is not metered.

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CHLORIDES: 2700 ppm (initial) Data from water Declaration.
FIELD INSPECTION INFORMATION CHECKLIST  
(Ver 4/3/91)

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Declarant's File Reference: BHP PETROL

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4. If this person takes from a multi-user pipe or ditch system?  NOT APPLICABLE

PART II: WATER SOURCE  
Source/Well # 1805-03  Name: Firewell

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3. Tax Map Key at the source: 9-1-31:03
   Determine declarant's relation to source.
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   3) Use the water from this source? Yes
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4. Does any one else also use water from this source? No
   If yes, is their use included in this user's declaration?
   Who are the other users? Did they file?  NOT APPLICABLE

REMARKS: BHP Petroleum - formally Hawaiian independent Refinery.

VERIFIED BY:  DATE: 3/4/93
Hawaiian Independent Refinery

Attention: Mr. William W. Mills

Project: Emergency Firewater Well, WW-1208
Contract ENG 1985-10

Gentleman:

Enclosed please find drawing and data for completion of Foundation International, Inc.'s scope of work at the above captioned location.

I) Existing Casing - Remove and Replaced

II) Well Shaft - Existing Well shaft open to 39'0 feet with approximately 2'0 feet of fragmented coral (fill)

III) Material Samples - samples were taken at
   39'0 feet - fragmented coral (fill)
   43'0 feet - coral w/ clayey sand
   46'0 feet - coral w/ clayey sand
   50'0 feet - coral w/ clayey sand

IV) Water Samples -
   Not available due to heavy contamination of sand/silt as a result of redrilling of open shaft.

V) Advancement of shaft -
   Shaft was drilled to 45'0 feet and belled to 5'0 feet in diameter, due to high rate of sand/silt floatation in water shaft was advanced to 50'0 feet to allow for settlement of same without filling belled area.

VI) Pump Test -
   Pump test was completed with Gorman Rupp 6 inch pump with maximum 2800 GPM capacity.

VII) Results -
   Maximum draw down from elevation -12'0 to -15'0 feet during three separate pump test of 10 minutes each. At completion of each pump test, water level at elevation -12'0 feet or MSL within one minute of termination of pump test.

SOIL TESTING • DEWATERING • PREDRILLING • PROBE HOLES • BELLED CAISSONS
Remove and Replace
Existing 4 X 4 Steel Plate

Remove and Replace
Existing CS-24 Inch Casing X 6'0 FT.

Remove and Replace
Existing CS-20 Inch Casing X 19'0 FT.

45'0 FT.

5'0 Dia. Bell

24 Inch Dia. Shaft

5'0 FT.
**STATE OF HAWAII**

**DEPARTMENT OF LAND & NATURAL RESOURCES**

**DIVISION OF WATER AND LAND DEVELOPMENT**

**DRILLER'S REPORT**

**DESCRIPTION**

Date of report: January 2, 1986  
Person filing report: Chris Jansen

**A. OWNER**  
Refinery, Inc.

**NAME**  
Emergency Firewater Well

**ISLAND**  
Oahu

**B. GENERAL LOCATION**  
91-325 Komohana Street, Ewa Beach, Hawaii

**C. DRILLING COMPANY**  
Foundation International

**D. TYPE OF RIG**  
Watson 3000

**E. ELEVATION, msl:**  
Top of drilling platform: 10 ft.  
Height of drilling platform above ground surface: 0 ft.  
Topographic map

**F. HOLES SIZE:**

- 24 inch dia. to 50 ft. below drilling platform.
- 20 inch dia. to 50 ft. below drilling platform.
- 10 inch dia. to 50 ft. below drilling platform.

**G. CASING INSTALLED:**

- 20 in. I.D. x 0.6. in. wall solid section to 19 ft. below drilling platform.
- 30 in. I.D. x 0.10. in. wall perforated section to 50 ft. below drilling platform.

**H. ANNULUS:**

Gravel packed to ft. below drilling platform.

Gravel packed to ft. below drilling platform.

**I. PERMANENT PUMP INSTALLATION:**

- Pump type, make, serial no.: Peerless Model 14MC  
- Motor type, H.P., voltage, r.p.m.: Caterpillar Model 3208T, 260 H.P.

**J. INITIAL WATER LEVEL:**  
10 ft. below drilling platform, Date of measurement: July 19, 1985

**K. INITIAL CHLORIDE:**  
2700 ppm, total depth of well: 50 ft. below drilling platform, Date of measurement: July 19, 1985

**L. PUMPING TESTS:**

**Date:** July 19, 1985  
**Reference point (R.P.) used:** Casing which elevation is 12 ft.

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<th>Depth (ft.)</th>
<th>Rate Drawn (ft.)</th>
<th>Cl. (ppm)</th>
<th>Temp. °F</th>
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**M. DRILLER'S LOG:**

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<th>Depth (ft.)</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level ft.</th>
<th>Depth (ft.)</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 39</td>
<td>Existing hole</td>
<td>MSL</td>
<td>to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39 - 50</td>
<td>Coral w/clayey sand (0')</td>
<td></td>
<td>to</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**N. REMARKS:**

---

**FOR DRILLER'S USE**

**Job Name:**  
**Job No.:** W11208

---

**INSTRUCTIONS:** Send three(3) copies to: Manager-Chief Engineer, Division of Water and Land Development, P. O. Box 373, Honolulu, Hawaii 96809.


---

**FOR OFFICIAL USE**

**Latitude:** 21.18.19  
**Longitude:** 158.05.25  
**Well No.:** 1805-03
TO: Hawaiian Independent Refinery, Inc.

In accordance with Chapter 166 of Title 13, "Rules for the Control of Ground Water Use in the State of Hawaii", your application to drill an emergency fire fighting well (State Well No. 1805-03) at Campbell Industrial Park is approved subject to the following conditions:

1. A Driller's Well Completion Report (form enclosed) shall be submitted to the Division of Water and Land Development within 60 days after completion of the well.

2. Pumping test data shall be submitted to the Division of Water and Land Development within 60 days after testing of the well.

3. The applicant comply with all applicable laws, rules and ordinances.

Date of Issuance
10/18/85

Enc. (Driller's Report Form)
cc: USGS
Dept. of Health, Drinking Water Program
Honolulu BWS

SUSUMU ONO
Chairperson of the Board
DIVISION OF WATER AND LAND DEVELOPMENT

FROM: [Signature]

DATE: 8/17

FILE IN: [Blank]

TO: INITIAL:

M. TAGOMORI
T. Fujii
H. Sakai
H. Morimatsu
A. Ching
G. Morimoto
G. Matsumoto
P. Matsuo
L. Asari
D. Lum
S. Samuels

PLEASE:

See Me
Take Action By
Route to Your Branch
Review & Comment
Draft Reply By
Acknowledge Receipt
Xerox copies
File
For Information

REMARKS:

Copy with the PL
Check

Do not hold up processing
Mr. Susumu Ono  
Department of Land and Natural Resources

Re: Emergency Water Supply Well

Dear Mr. Ono:

Attached for your consideration is a permit application and a $100 filing fee for an emergency water supply well for the purpose of firefighting at the Hawaiian Independent Refinery, Inc., located in Campbell Industrial Park. The existing well was previously used for hydrotesting tanks at the refinery. However, due to the need to increase flow capacities, it has been modified. The well is located in the brackish caprock area.

A permit application or well certification has not been previously submitted. The water was sampled and tested on July 19, 1985 at the water table. The chloride results were 2700 parts per million.

If there are any questions or further information required, please call me at [redacted]

Sincerely,

Chris Jansen  
Environmental Affairs Coordinator

CJ/em  
Attachment

cc: Samuel L. Keala, Jr.  
Campbell Estate

filing fee deposited - 9/5/85 by DH.
APPLICATION FOR

☐ WELL DRILLING PERMIT  ☐ WELL MODIFICATION PERMIT

Instructions: Send completed application and attachments to Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

Reference: Regulation 9, Dept. of Land & Natural Resources.

Is the well located in a Designated Ground Water Control Area? ☐ Yes ☒ No

If "yes", application must be accompanied by a Water Use and/or Water Supply Permit and a non-refundable filing fee of $100 payable to the Department of Land & Natural Resources. However, if application is for minor modification of well, filing fee may be waived. If "no", no filing fee is required. Filing fee is waived for federal, state, and county government agencies.

1. WELL LOCATION: Island Oahu Tax Map Key 9-1-31-3. Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER Hawaiian Independent Refinery, Inc. Telephone Zip Code 96707

3. PROPOSED DRILLING COMPANY: Foundation International, Inc.

4. PROPOSED WORK: ☐ Drill new well ☐ Deepen ☐ Redrill ☐ Alter ☐ Seal ☐ Abandon ☐ Install new pump ☐ Replace pump ☐ Modify pump

Fill in the diagram and briefly describe the proposed work (use back of form if necessary):

Existing well shaft was deepened to 45'-0" and belled to 5'-0" in diameter and then shaft was advanced an additional 5'-0" feet.

PROPOSED SECTION OF WELL

Steel plate 4'-0" square

Elevation at top of casing 12 ft. msl.

Ground Elev. 10 ft. msl

Solid casing:
Material Carbon steel
Length 6'-0"
Diameter 24 in.
Wall thickness 0.688 in.

Casing: Perforated Scoe
Material Carbon steel
Length 19'-0"
Diameter 20 in.
Wall thickness 0.594 in.
Openings NA

Open Hole:
Length 27 ft.
Diameter 24 in.
Belled 5'-0" at 45'-0"

PROPOSED USE: ☐ Municipal ☐ Military ☐ Agriculture ☐ Domestic ☐ Disposal ☐ Other (specify)

PROPOSED AMOUNT OF WITHDRAWAL: Check most appropriate box and fill in amount.
☐ Daily gallons ☐ Monthly gallons ☐ Yearly gallons

PROPOSED PUMP OR FLOW CAPACITY: 1500 (Emergency) gallons per minute

Signature: ________________________ Date: 8/1/85

Water User

Signature: ________________________ Date: 8/15/85

Landowner of Well Site

For Official Use:

State Well No. 1805-03

DLNR Permit No. ________________________

DLNR Application No. ________________________
APPLICATION FOR:  (check one)

☐ PERMIT TO WITHDRAW WATER FOR BENEFICIAL USE
☐ PERMIT TO SUPPLY WATER FOR BENEFICIAL USE

Instructions: Fill out, sign, and send application with pertinent attachments to Dept. of Land & Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809. A non-refundable filing fee of $100 is required, excepting military, federal, state, and local government agencies.

1. NAME OF APPLICANT: Hawaiian Independent Refinery, Inc.

2. REQUESTED BENEFICIAL USE OF WATER:
   ☐ Domestic ☐ Municipal ☐ Military ☐ Agricultural ☐ Industrial ☐ Other (specify)
   Appropriately describe nature and purpose of requested use: Emergency source of water for firefighting

   Proposed commencement date of water use: October 1985

3. REQUESTED AMOUNT OF WITHDRAWAL OR SUPPLY:
   Average Annual mgd; Maximum Month mgd; Maximum Day mgd
   Appropriately describe schedule or times of taking requested withdrawal:

    For emergency use only

4. NATURE AND TERM OF REQUESTED PERMIT: ☐ Temporary ☐ Permanent

   Requested period of permit

5. PROPOSED SOURCE OF WATER SUPPLY:
   ☐ Existing source ☐ Modification of existing source ☐ New source
   Briefly describe existing or proposed source and any related facilities and submit map, plot plan, and plans or drawings of source of supply: 24" Dia x 50'-0" Deep (Belled 5'-0" Dia. at 45'-0" deep and advanced 24" Dia. shaft an additional 5'-0"

   If construction work is proposed for new or modified existing source, give:
   Commencement Date 7/19/85 Completion Date 7/19/85

6. ASSESSMENT OF REQUESTED WATER USE OR SUPPLY
   In a separate attachment to this application, applicant must provide a written assessment addressing the desirability of issuing the requested permit, including such considerations as the availability of water, the beneficial purpose of the proposed water use, and the impact, if any, of the proposed water use on existing permitted uses, preserved uses, and individual household uses. See cover letter.

   Signature: ____________________________ Date: 8/12/85
   Water User or Supplier

   Signature: ____________________________ Date: ____________________________
   Owner of Water Source

In accordance with Department Regulation No. 9, every permit approved and issued by the Board of Land & Natural Resources shall be for a specified period of time, for a specified beneficial use, subject to suspension and revocation, and subject to the shortage and emergency powers of the Board. Consideration of applications for a permit shall include: availability of water, beneficial purpose of water use, non-impairment of the most beneficial use and development of the water resources in the designated area, and no substantial and material interference with existing uses of water.

For Official Use:
Docket No. 180 days 7/19/85
Board Approved Disapproved
Well No. 1805-03
Hawaiian Independent Refinery

Attention: Mr. William W. Mills

Project: Emergency Firewater Well, WW-1208
Contract ENG 1985-10

Gentleman:

Enclosed please find drawing and data for completion of Foundation International, Inc.'s scope of work at the above captioned location.

I) Existing Casing - Remove and Replaced

II) Well Shaft - Existing Well shaft open to 39'0 feet with approximately 2'0 feet of fragmented coral (fill)

III) Material Samples - samples were taken at
39'0 feet - fragmented coral (fill)
43'0 feet - coral w/ clayey sand
46'0 feet - coral w/ clayey sand
50'0 feet - coral w/ clayey sand

IV) Water Samples - Not available due to heavy contamination of sand/silt as a result of redrilling of open shaft.

V) Advancement of shaft - Shaft was drilled to 45'0 feet and belled to 5'0 feet in diameter, due to high rate of sand/silt floatation in water shaft was advanced to 50'0 feet to allow for settlement of same without filling belled area.

VI) Pump Test - Pump test was completed with Gorman Rupp 6 inch pump with maximum 2800 GPM capacity.

VII) Results - Maximum draw down from elevation -12'0 to -15'0 feet during three separate pump test of 10 minutes each. At completion of each pump test, water level at elevation -12'0 feet or MSL within one minute of termination of pump test.
VIII) Conclusions -
Firewater well to have capacity of exceeding required 2000 GPM as set forth in contract specifications.

If you have any questions pertaining to the above please feel free to contact me at your convenience.

Sincerely,

Foundation International, Inc.

Gerald D. Konrath, President

CDK: cw
Remove and Replace
Existing 4' X 4' Steel Plate

Remove and Replace
Existing CS-24 Inch Casing X 6'0 FT.

Remove and Replace
Existing CS-20 Inch Casing X 19'0 FT.

45'0 FT.

5'0 Dia. Bell

5'0 FT.

24 Inch Dia. Shaft
WELL DRILLING PERMIT

TO: Hawaiian Independent Refinery, Inc.

Attention: Mr. Chris Jansen

Your application to drill a back-up wastewater injection well at TMK: 9-1-31:2401B, Campbell Industrial Park, is approved in accordance with Chapter 166 of Title 13, "Rules for the Control of Ground Water Use in the State of Hawaii," subject to the following conditions:

1. No withdrawals of water shall be made from the well.

2. A copy of the driller's logs and a completed Driller's Report form (enclosed) shall be submitted within 60 days after well completion.

3. The chloride content of the well at the water table and at the bottom of the well shall be determined and reported.

4. The applicant shall comply with all applicable rules, ordinances, and laws.

The filing fee for this disposal well is waived.

Chairperson of the Board

Date of Issuance

9/24/93
DIvision of water and land development

From: [Blank]
Date: 9/20
File In: [Blank]

To: Initial

- [Blank]
- Robert T. Chuck
- Takeo Fujii
- James Yoshimoto
- Manabu Tagomori
- George Morimoto
- Herbert Morimatsu
- George Miyashiro
- Harold Sakal
- Leslie Asari
- Albert Ching
- George Matsumoto
- Daniel Lum
- Paul Matsuo
- Noboru Kaneshiro
- Edwin Sakoda

See Me

Take action by
Route to your branch
Review & comment
Draft reply by
For Information
Xerox distributed
Acknowledge receipt

File

Dorothy Iwama
Lorraine Nanbu
Jean Starot
Elise Yonamine
Kay Oshiro

NO D.R. (9/26/63)

Mitch - have we received any update on 1806-#(DR)
from ENERCO, Inc.

Pls note record

Dia. Prof. 3 bag should be 14" instead of 10" shown. Opening 7.5".

Sig in LF is obviously incorrect.
2.5" LF

May 19, 64 - test well salinity

Soil test for geol. test well salinity

3/5/64 - test well salinity

If you don't have any existing data,
September 19, 1983

Mr. Robert T. Chuck
Manager and Chief Engineer,
DOWALD
State of Hawaii
Department of Land and Natural Resources

Dear Mr. Chuck:

Attached is a Well Drilling Permit Application for a back-up wastewater injection well to be constructed at Hawaiian Independent Refinery, Inc. located in Campbell Industrial Park on Oahu. Two disposal wells currently exist at the facility.

Also included for your information is a copy of HIRI's existing Permit to Operate issued by the State Department of Health under Chapter 38(59) of the Public Health Regulations.

If there are any questions, please do not hesitate to contact me at [Redacted].

Sincerely,

HAWAIIAN INDEPENDENT REFINERY, INC.

Chris Jansen
Environmental Affairs Coordinator

CJ:lw

Enclosures
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

APPLICATION FOR (check one)

☑ WELL DRILLING PERMIT ☑ WELL MODIFICATION PERMIT

Instructions: Send completed application and attachments to Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

Reference: Chapter 186, Dept. of Land & Natural Resources.

Is the well located in a Designated Ground Water Control Area? ☑ Yes * ☑ No

If "yes", application must be accompanied by a Water Use and/or Water Supply Permit and a non-refundable filing fee of $100 payable to the Department of Land & Natural Resources. However, if application is for minor modification of well, filing fee may be waived. If "no", no filing fee is required. Filing fee is waived for federal, state, and county government agencies.

1. WELL LOCATION: Island Oahu Tax Map Key 9-1-31-2401B. Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER Hawaiian Independent Refinery, Inc. Telephone:

3. PROPOSED DRILLING COMPANY: Roscoe - Moss

4. PROPOSED WORK: ☑ Drill new well ☑ Deepen ☑ Redrill ☑ Alter ☑ Seal ☑ Abandon ☑ Install new pump ☑ Replace pump ☑ Modify pump

Fill in the diagram and briefly describe the proposed work (use back of form if necessary):

PROPOSED SECTION OF WELL

Elevation at top of casing 12.5 ft. msl.

Cement Grout 75 ft.

Hole Dia. 20 in.

Total Depth 110 ft.

Rock Packing - ft.

Ground Elev. 10 ft. msl.

Solid casing:

Material PVC

Length 65 ft.

Diameter 14 in.

Wall thickness .437

Casing:

Material PVC

Length 105 ft.

Diameter 4 in.

Wall thickness .45 in.

Openings 0.8 sq.in./L.ft

Discharge fluid tubing

Open Hole:

Length 35 ft.

Diameter 12 in.

*Approximate elev. at filing. Final elev. (msl) by a surveyor licensed by the State must be submitted at start of construction.

5. PROPOSED USE: ☑ Municipal ☑ Military ☑ Agriculture ☑ Industrial ☑ Domestic ☑ Disposal ☑ Other (specify) __________

6. PROPOSED AMOUNT OF WITHDRAWAL: Check most appropriate box and fill in amount.

☐ Daily ___ gallons ☐ Monthly ___ gallons ☐ Yearly ___ gallons

7. PROPOSED PUMP OR FLOW CAPACITY: 200 gallons per minute

Signature: ________________ Date: __________

Water User

Signature: ________________ Date: __________

Landowner of Well Site

*Back-up Disposal Well

For Official Use:

State Well No. 1805-03

DLNR Permit No. ______________________

DLNR Application No. ____________________
RECEIVED
11 SEP 20 A 8:45

U.S. DEPARTMENT OF WATER & POWER DEVELOPMENT
PERIODIC ACID
FLUSH TREATMENT


COVER FL OR 14" BLIND FLANGE
CONCRETE CAP (3'-0" x 3'-0" x 1'-0"")
3'-6" BC. BARS
8'-4" VERT BARS

20" φ HOLE, DRILLED
TO 65' DEPTH

14" φ PVC PIPE,
TO 65' DEPTH &
CEMENTED TO SURFACE

- 65 FT LEVEL

2" SCH 40 PVC,
STRAPPED OR
BANDED TO 4"

- 90 FT LEVEL

- 100 FT LEVEL

12" φ HOLE

4" SCH 40 PVC PIPE, 100' REQ'D.
BOTTOM 30 FT TO BE SLOTTED WITH
FOUR ROWS OF 1/8" X 1/4" SLOTS SPACED AT
16" APART AND STAGGERED.

5' CEMENT PLUG - DRILL THROUGH
W/ 12" BIT.

NOTES:
1. FOR LOCATION, SEE DWG NO.

HAWAIIAN INDEPENDENT REFINERY INC.
A PROIFIC RESOURCES, INC. COMPANY
61-325 KOMOKONA STREET; EWA BEACH, HAWAII 80870
TELEPHONE (808) 688-4505

W-1201C
BACK-UP WASTE WATER
INJECTION WELL

DRAWN JJ
DATE 7-25-78
CHECKED JJ
APPROVED JJ
SCALE NO SCALE
PROJECT NO. 64-1313
DRAWING NO. 1109-G-D-23
State of Hawaii
Department of Health

Permit No. TO 1042
Application No. TO 1042

AUTHORIZATION TO OPERATE
A PRIVATE WASTEWATER TREATMENT WORKS

In compliance with the provisions of Chapter 342, Hawaii Revised Statutes, as amended, and Chapter 38 of Public Health Regulations, Department of Health, State of Hawaii

HAWAIIAN INDEPENDENT REFINERY, INC.

is authorized to operate a private wastewater treatment system located at the Hawaiian Independent Refinery, Inc., 91-325 Komohana Street, Ewa Beach, Oahu,

to discharge treated wastewater into injection wells,

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective upon issuance.

This permit and the authorization to operate shall expire at midnight, April 30, 1986.

Signed this 6th day of August, 1981

(Seal) Director of Health

PERMIT ISSUED
Date AUG 6 1981
PERMIT ISSUED
Date AUG 6 1981

I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS*

During the period beginning the effective date of this permit and lasting through April 30, 1986.

1. Such discharges shall be limited and monitored by the permittee as specified below:

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements***</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kg/day(lbs/day)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daily Average</td>
<td>Daily Max.</td>
</tr>
<tr>
<td>Flow m³/day (MGD)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>BOD₅**</td>
<td>1000</td>
<td>--</td>
</tr>
<tr>
<td>Hexavalent Chromium</td>
<td>0.23</td>
<td>--</td>
</tr>
<tr>
<td>Total Chromium</td>
<td>11</td>
<td>--</td>
</tr>
<tr>
<td>Ammonia (as N)</td>
<td>485</td>
<td>--</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>350</td>
<td>--</td>
</tr>
<tr>
<td>Phenol</td>
<td>12.0</td>
<td>--</td>
</tr>
<tr>
<td>Total Sulfide</td>
<td>10.0</td>
<td>--</td>
</tr>
<tr>
<td>Total Suspended Solids**</td>
<td>448</td>
<td>--</td>
</tr>
<tr>
<td>pH</td>
<td>Not less than 6.0 standard units nor greater than 9.0 standard units</td>
<td>Once/Month</td>
</tr>
</tbody>
</table>

*The effluent limitations contained above are based upon a present daily average plant production level of 70,000 bbl/day. Any significant increase or decrease in this production level, shall be reported to the Director within one week of its commencement. The Director shall then review this entire permit, in light of the change, to ascertain the appropriateness of the effluent limits contained in this condition and may, if he determines them to be inappropriate, modify them accordingly.

**Both the influent and the effluent shall be monitored.

***The monitoring schedule shall become effective immediately upon the effective date of this permit.

2. Discharges shall not cause objectionable odors at the surface of the receiving waters.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
   Influent samples shall be taken downstream from any additions to the trunk sewer and prior to treatment.
   Effluent samples shall be taken downstream from the treatment works and prior to disposal into injection
B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

   The permittee shall operate in accordance with a wastewaters' sludge disposal plan, to be implemented immediately upon the effective date of this permit, which shall include the necessary treatment and transportation of the sludge, assuring that the disposal method will not result in the contamination of underground drinking water sources or surface waters, or create public health hazards, nuisances or vector propagation. Sludge disposal operations shall conform with Section 4.5.c. of Chapter 38, Public Health Regulations.

2. No later than 7 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

3. A "schedule of compliance" means a program composed of two integral parts: (a) plan—description of new or modified facilities to treat and dispose of the effluent; and (b) schedule—a timetable setting forth the date by which all wastewaters will be in compliance with the effluent limitations of this permit. The schedule shall include (if appropriate) dates by which the permittee will accomplish:

   a. Completion of a preliminary engineering plan report;

   b. Completion of construction plans and specifications;

   c. Initiation of construction;

   d. Completion of construction;

   e. Demonstration of compliance with effluent limitations.
C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitoring discharge.

2. Reporting

Monitoring results obtained during the previous three (3) months shall be summarized for each month and submitted on forms to be supplied by the Director, to the extent that the information reported may be entered on the forms. The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this permit. Unless otherwise specified, discharge flows shall be reported in terms of the average flow over each 30-day period and the maximum daily flow over that 30-day period. Monitoring reports shall be postmarked no later than the 28th day of the month following the completed reporting period. The first report is due on November 28, 1981. Signed copies of these, and all other reports required herein, shall be submitted to the Director at the following address:

Director of Health
State Department of Health
Attn: Environmental Protection &
Health Services Division
1250 Punchbowl Street
Honolulu, HI 96813

3. Definitions

See Part III.

4. Test Procedures

Test procedures for the analysis of pollutants including handling and preservation of samples shall be performed in accordance with Standard Methods.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date, and time of sampling;

b. The dates the analyses were performed;

c. The person(s) who performed the analyses;

d. The analytical techniques or methods used; and

e. The results of all required analyses.
6. *Additional Monitoring by Permittee*

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated.

7. *Records Retention*

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Director.

PERMIT ISSUED
Date AUG 6 1981
A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, or treatment modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Director with the following information, in writing, within five (5) days of becoming aware of such condition:

a. A description of the discharge and cause of noncompliance; and

b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

Any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall promptly notify the Director in writing of each such diversion or bypass in accordance with the procedure specified in Part II, A.2, above.
6. **Removed Substances**

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

7. **Safeguards to Electric Power Failure**

See Part III—OTHER REQUIREMENTS.

**B. RESPONSIBILITIES**

1. **Right of Entry**

The permittee shall allow the Director, and, or his authorized representatives, upon the presentation of credentials:

   a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

   b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

2. **Transfer of Ownership or Control**

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director.

3. **Availability of Reports**

Except for data determined to be confidential, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Director. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Chapters 321 and 342, Hawaii Revised Statutes.

4. **Permit Modification**

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

   a. Violation of any terms or conditions of this permit;

   b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

   c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
PART III  OTHER REQUIREMENTS

PART III.A.7. SAFEGUARDS TO ELECTRIC POWER FAILURE

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall:

a) Maintain in good working order an alternate power source sufficient to operate the wastewater control facilities; or if such alternate power source is not in existence, shall:

b) Halt, reduce or otherwise control all discharge upon the reduction, loss or failure of the primary source of power to wastewater control facilities.

PART III.A. REAPPLICATION

If the permittee desires to continue to discharge, he shall reapply not later than 180 days before this permit expires, on the application forms then in use.

PART III.B. DEFINITIONS

1. "Composite Sample" means sample(s) collected on regular intervals in proportion to the existing flow and then combined to form a sample representative of flow over a period of time. For the purposes of this chapter, a composite sample means at least four (4) equally timed grab samples taken over a twelve (12) consecutive hr/day period and proportioned according to the flow rate.

2. A "discrete sample" means an individual sample collected in less than 15 minutes.

PERMIT ISSUED

Date  AUG 6 1981
November 16, 1983

Mr. Robert T. Chuck
Manager and Chief Engineer, DOWALD
State of Hawaii
Department of Land and Natural Resources
P. O. Box 373

Dear Mr. Chuck:

Attached as required is a completed copy of a "Driller's Report" for the permitted back-up wastewater injection well located at Hawaiian Independent Refinery, Inc. at Campbell Industrial Park on Oahu.

If there are any questions, please do not hesitate to call me at [redacted]

Sincerely,

PACIFIC RESOURCES, INC.

Chris Jansen
Environmental Affairs Coordinator

CJ:jt

cc: E. D. Lewis
L. K. Young
November 16, 1983

Mr. Robert T. Chuck
Manager and Chief Engineer, DOWALD
State of Hawaii
Department of Land and Natural Resources

Dear Mr. Chuck:

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If there are any questions, please do not hesitate to call me at

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PACIFIC RESOURCES, INC.

Chris Jansen
Environmental Affairs Coordinator

CJ:jt
cc:  E. D. Lewis
     L. K. Young
DRILLER'S REPORT

DESCRIPTION

Date of report: 10/17/83
Person filing report: Chris Jansen

Hawaiian Independent

WELL

Name: well

A. OWNER: Refinery, Inc.

B. GENERAL LOCATION: Campbell Industrial Park

C. DRILLING COMPANY: Roseme Moss Company

D. TYPE OF RIG: DRILLING COMPLETED 9/30/83

E. ELEVATION, msl: Top of drilling platform 20 ft. Bench mark and method used to determine

Height of drilling platform above ground surface 10 ft. elevation:

F. HOLE SIZE: 20 inch dia. to 67 ft. below drilling platform.

12 inch dia. to 101 ft. below drilling platform.

G. CASING INSTALLED: 13.074 in. I.D. x .438 in. wall solid section to 67 ft. below drilling platform.

in. I.D. x in. wall perforated section to ft. below drilling platform.

Type of perforation rows of 29.1/2" @ holes in bottom 20 ft. section.

H. ANNULUS: Grouted 0 ft. to 67 ft. below drilling platform.

Gravel packed ft. to ft. below drilling platform.

HYDROLOGY

J. INITIAL WATER LEVEL 12 ft. below drilling platform. Date of measurement: 9/30/83

K. INITIAL CHLORIDE: 20, 20 ppm, total depth of well 103 ft. below drilling platform

L. PUMPING TESTS:

Reference point (R.P.) used: casing, which elevation is ft.

Date: 9/30/83

Start water level 12 ft. below R. P.

End water level 12 ft. below R. P.

Depth of well 102 ft. below R. P.

Rate (gpm) Drawn-down (ft.) Capacity (gpm)

Time (hours) to

9:00a-to 0 12.0 Ambient

9:15-to 9:15 350 8.53

9:50-to 10:15 10.85

10:15-to 10:30 3.92

10:30-to 12:25 2.76

L. PUMPING TESTS:

Sampling Date: 9/30/83

Start water level 12 ft. below R. P.

End water level 12 ft. below R. P.

Depth of well 102 ft. below R. P.

Rate (gpm) Drawn-down (ft.) Capacity (gpm)

Time (hours) to

12:25 to 12:30 500 6.23 Ambient

12:30 to 12:32 0 8.53

12:32 to 12:34 0 10.85

12:34 to 12:39 0 10.85

12:39 to 4:00 Above Grade

SUBSURFACE FORMATION

M. DRILLER'S LOG:

Depth, ft. Rock Description & Remarks Water Level Depth, ft. Rock Description & Remarks Water Level

0 to 4 Surface fill & coral ft. 93 to 96 White coral ft.

4 to 12 Gray coral 96 to 101 Gray Reef Coral 12

12 to 22 Blue rock w/coral seam 12 to 28 Blue rock 12 to 38 Coral reef sand 12

38 to 52 Blue coral rock 12 to 57 Blue grey coral rock 12 to 75 Blue rock 12 to 76 Coral sand & rock 12 to 78 to 75 Cement type gravel & coral 12 to 78 to 75 Short hard layer 12 to 78 to 93 Cemented layer/gravel 12 to 78 to 93

N. REMARKS:

INSTRUCTIONS: Send three copies to: Manager-Chief Engineer, Division of Water and Land Development, O. Box 373, Honolulu, Hawaii 96809.

FILE CLOSED
8-13-97
SEE FOLDER FOR
1905-03,17,18
FOR MUP INFO
MEMORANDUM FOR THE RECORD

FROM: Lenore

SUBJECT: BHP Refinery (Hawaiian Refinery) Well No. 1805-03 Minimum Chloride Standards

Chris Jansen called 8/13/97 re: our letter of 7/16/97 to establish minimum chloride standards. He said their well chlorides start out pretty good (~5,000 mg/l) then shoots up to just about sea water pretty quickly. Told him that, since their well is permitted for emergency fire use only (0.00 mgd allocation), no need respond to our letter.

see Ewa Caprock Folders #4
for copy of 7/16/97 letter
Mr. Chris Jansen  
Hawaiian Refinery Inc.

Dear Mr. Jansen:

Warning of Potential Water Shortages  
Ewa Caprock Water Management Area

The Commission has recently approved additional temporary water use permits in the Ewa Caprock Water Management Area. As a part of these approvals, the Commission has directed staff to issue a formal warning of potential future ground water shortages in this water management area to all other existing water use permittees.

The reason for concern is that as urbanization continues to replace existing sugarcane, there is potential for the caprock water to increase beyond usable brackish limits unless the irrigation recharge supplied to the caprock by Oahu Sugar Company (OSCo.) is replaced by some other means. It is possible that by 1995, recharge from sugarcane irrigation may completely cease.

Staff is presently working on the Ewa Caprock Regional Plan which is, in part, an effort to bring about alternative sources to supply non-potable demands in the Ewa region. This effort is to supplement and provide a back-up non-potable source to the caprock aquifer. If you are interested in participating in this regional plan, please contact us.

Staff is also requesting all permittees, who have not done so already, to submit a water shortage plan. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Ewa Caprock Ground Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required by law to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submitting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please contact Roy Hardy at [phone number]

Sincerely,

RAE M. LOUI
Deputy Director
DECLARANT (FILE REF.): BHP PETROL

PRESENT: Leonard Young, M. Ohye

LOCATION: TMK 9-1-31:03 Campbell Industrial Park

SOURCE(S): Well 1805-03 (Caprock Source)

USE(S): Emergency fire protection, Hydro-static testing of storage tanks and pipelines.

FIELD NOTES:

SOURCE: BHP Petroleum is located at 91-325 Komohana St. in Campbell Industrial Park. Well 1805-03 was modified in July 1985. Work included removing and replacing a 20 inch dia. steel casing, 19' in depth and deepening well bore from 39' to 50'. Well is equipped with a Randolph vertical turbine pump model no. 250 G, 250 h.p., 1760 rpm, serial no. G050-C8500283. There was no reference to the pump capacity on the information plate attached to the pump. According to the water declaration the capacity should be 1500 gallons per minute. Well is not metered.

USE: Emergency fire protection is the primary use, however according to Leonard Young water is also used for Hydro-static testing of storage tanks and pipelines. Testing usually occurs once or twice a year. Well is pumped for 15 minutes once a week to keep diesel engine in working condition.

LOCATION: TMK: 9-1-31:03 GPS Latitude 21° 18' 22" Longitude 158° 05' 23"

OWNERSHIP: BHP Petroleum - formerly Hawaiian Independant Refinery, Inc.

CHLORIDES: 2700 ppm (initial) Data from water Declaration.
FIELD INSPECTION INFORMATION CHECKLIST  (Ver 4/3/91)

PART I: USE OF WATER  Declarant's File Reference: BHP PETROL

1. Tax Map Key where the water is used: 9-1-31:03
   Does the declarant own this land? No (Campbell Estate)
   What is the water used for? Emergency fire protection, hydro-static testing of tanks and pipes.
   If for irrigation, how many acres are being irrigated? by crop type?
   If for livestock, how many and what kind?
   If for drinking, at how many houses?
   By how many people?

3. Is the quantity of water use being measured? No
   If yes, document the location of the measurement point and method of measurement; also get use records
   if these were not submitted previously.

4. If this person takes from a multi-user pipe or ditch system?

PART II: WATER SOURCE  Source/Well # 1805-03  Name: Firewell

1. Where does the water come from/what kind of source is this? Brackish Caprock

2. Show the source location on maps, determine latitude and longitude, and document the nature
   of source development by measurements, sketches, and photographs.
   How is the water taken? Randolph vertical turbine pump-250 h.p., 1760 rpm
   What is the capacity for taking (gpm)? 1500 gpm (according to water declaration)
   How often is it taken (used)? Emergencies, hydro-static testing of storage tanks and pipelines 1-2
   times a year.

3. Tax Map Key at the source: 9-1-31:03
   Determine declarant's relation to source.
   Does the declarant:
   1) Operate and maintain the source? Yes
   2) Own the land at the source? No
   3) Use the water from this source? Yes
   4) Own the land where the water is being used? No

4. Does anyone else also use water from this source? No
   If yes, is their use included in this user's declaration?
   Who are the other users? Did they file?

REMARKS: BHP Petroleum - formally Hawaiian independent Refinery.

VERIFIED BY:  DATE:
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

REGISTRATION OF WELL AND DECLARATION OF WATER USE

INSTRUCTIONS: Please type or print. If information is not available or not applicable, indicate as N/A. Fill out as completely as possible, sign, and file form with the Division of Water Resource Management, c/o the State of Hawaii, Department of Land and Natural Resources, Division of Water Resource Management, 8810 Iwilei Road, Suite 206, Honolulu, Hawaii 96813. Phone 471-3477 or 471-3948 for assistance.

BATTERY OF WELLS: For a battery of wells, on the surface, in a tunnel, or in a shaft, submit a registration form for each well together with a single map or plot plan showing layout of wells.

STATE WELL NO.: 4906-03
WELL NAME OR DESIGNATION: BARBERS POINT
ISLAND: OAHU

A. WELL OPERATOR
Firm name: Hawaiian Ind. Refining Inc.
Contact person: Leonard K. Young
Address: 91-325 Komohana Street, Ewa Beach, HI 96707
Phone: 547-3942

B. OWNER OF WELL SITE
Firm name: Hawaiian Independent Refinery, Inc.
Contact person: Leonard K. Young
Address: 91-325 Komohana Street, Ewa Beach, HI 96707
Phone: 547-3942

C. WELL LOCATION
Tax Map Key: 9-1-31:3
Town, Place, District: Campbell Industrial Park
Attach USGS "Quad" map (scale 1:24,000), tax map, or other map showing the well location.

D. WELL DATA
For Drilled Wells, submit "as-built" drawing, driller's log, and pump test results, and complete items below.
For Tunnels and Shafts, submit construction drawings, plot plan, or sketch map.

Ground elevation (Mean sea level): 10 ft.
Reference point (Used to measure depth to water): 0 ft.
Description: Topographic Map
Casing diameter: 20 in.
Solid casing depth (below ground): 23 ft.
Perforated casing depth (below ground): N/A ft.
Total depth of well: 50 ft.
Minimum recorded chloride: N/A ppm
Maximum chloride in 1987: N/A ppm

E. INSTALLED PUMP DATA
Pump type: Vertical shaft
Power: Not specified
Pump capacity: 1,500 gallons per minute
Pump installation contractor:

... (continued over)

For Official Use Only:
Date received: Date accepted: Field checked by: Date: Latitude: Hydrologic Unit:
Comments: Longitude: State Well No.

References: Hawaii Revised Statutes, Chapter 174C.
Hawaii Administrative Rules, Chapters 13-167 to 13-171.
F. DECLARATION OF WATER USE

NOTE: The purpose of the Declaration of Water Use is to obtain information necessary for the management of the State's water resources. The Declaration does not confer a legal right to water or its use.

Water use data are recorded: ☐ Daily ☑ Weekly ☐ Monthly
☐ Other (describe):

Method of measurement: ☐ Flow Meter ☐ Orifice
☐ Other (describe): Rated pumping capacity x minutes used

Quantity of Use (report metered or estimated monthly water use from the well described on the reverse side of this form, for the calendar years 1983 through 1987. For a battery of wells which are not individually metered, but which are connected to a single meter or other measuring device, report total use from the battery):

WATER USE, IN GALLONS x 1000

<table>
<thead>
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<td>October</td>
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<td>December</td>
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<td>ANNUAL</td>
<td>1,078</td>
<td>1,710</td>
<td>5,463</td>
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</tr>
</tbody>
</table>

Minimum day's use: ___________ gallons Maximum day's use: ___________ gallons
Typical times of usage: Once per week

Type of Use (check all category boxes that apply and provide additional information as indicated):

☐ Municipal (including resorts, hotels, businesses)
☐ Domestic (systems serving 25 people or less)
☐ Irrigation
☐ Industrial
☐ Military
☐ Other

Additional Information

Number of service connections:

Acres Irrigated:

Crop(s): ☐ Sugar ☐ Pineapple ☐ Other (specify):

Non-Crop: ☐ Landscape ☐ Golf Course ☐ Other (specify):

Method: ☐ Drip ☐ Furrow ☐ Sprinkler

☐ Cooling ☐ Manufacturing ☐ Mill ☐ Other (specify): Emergency source of water for firefighting

I declare that the contents of the above Declaration of Water Use are, to the best of my knowledge and belief, true, correct, and complete.

Water User's Signature: Everett D. Lewis
Printed Name: Everett D. Lewis
Date: 5/12/89
Firm or Title (Well Operator, etc.): Vice President-Manufacturing
OPERATION BRANCH
Commission on Water Resource Management

FROM: [Name Redacted]  DATE: 3-4-93  FILE IN:

TO:  INIT:  PLEASE:  REMARKS:

Y. SHIROMA  F. Ching  See Me  BHP PETROLEUM
R. Jinnai  M. Ohye  Review & Comment  (FORMERLY HAWAIIAN IND. REP)
I. Kunimura  S. Swanson  Take Action  FIELD MEMO - INVESTIGATED
R. Hardy  

FOR YOUR:

R. LOUI  S. Kokubun  Approval
G. MATSUMOTO  E. SAKODA  Signature

WAP application  FILE REF. TO READ:
FILE REF. TO READ:

WAP application
FILE REF. TO READ:
BHP PETROL

FILE REF. TO READ:
DECLARANT (FILE REF.): BHP PETROL

PRESENT: Leonard Young, M. Ohye

LOCATION: TMK 9-1-31:03 Campbell Industrial Park

SOURCE(S): Well 1805-03 (Caprock Source)

USE(S): Emergency fire protection, Hydro-static testing of storage tanks and pipelines.

FIELD NOTES:

SOURCE: BHP Petroleum is located at 91-325 Komohana St. in Campbell Industrial Park. Well 1805-03 was modified in July 1985. Work included removing and replacing a 20 inch dia. steel casing, 19' in depth and deepening well bore from 39' to 50'. Well is equipped with a Randolph vertical turbine pump model no. 250 G, 250 h.p., 1760 rpm, serial no. G050-C850283. There was no reference to the pump capacity on the information plate attached to the pump. According to the water declaration the capacity should be 1500 gallons per minute. Well is not metered.

USE: Emergency fire protection is the primary use, however according to Leonard Young water is also used for Hydro-static testing of storage tanks and pipelines. Testing usually occurs once or twice a year. Well is pumped for 15 minutes once a week to keep diesel engine in working condition.

LOCATION: TMK: 9-1-31:03 GPS Latitude 21° 18' 22" Longitude 158° 05’ 23"

OWNERSHIP: BHP Petroleum - formerly Hawaiian Independant Refinery, Inc.

CHLORIDES: 2700 ppm (initial) Data from water Declaration.
FIELD INSPECTION INFORMATION CHECKLIST (Ver 4/3/91)

PART I: USE OF WATER  Declarant’s File Reference: BHP PETROL

1. Tax Map Key where the water is used: 9-1-31:03
   Does the declarant own this land? No (Campbell Estate)
   What is the water used for? Emergency fire protection, hydro-static testing of tanks and pipes.
   If for irrigation, how many acres are being irrigated? by crop type? NOT APPLICABLE
   If for livestock, how many and what kind? NOT APPLICABLE
   If for drinking, at how many houses? NOT APPLICABLE
   By how many people? NOT APPLICABLE

3. Is the quantity of water use being measured? No
   If yes, document the location of the measurement point and method of measurement; also get use records
   if these were not submitted previously.

4. If this person takes from a multi-user pipe or ditch system? NOT APPLICABLE

PART II: WATER SOURCE  Source/Well # 1805-03  Name: Firewell

1. Where does the water come from/what kind of source is this? Brackish Caprock

2. Show the source location on maps, determine latitude and longitude, and document the nature
   of source development by measurements, sketches, and photographs.
   How is the water taken? Randolph vertical turbine pump-250 h.p., 1760 rpm
   What is the capacity for taking (gpm)? 1500 gpm (according to water declaration)
   How often is it taken (used)? Emergencies, hydro-static testing of storage tanks and pipelines 1-2
   times a year.

3. Tax Map Key at the source: 9-1-31:03
   Determine declarant’s relation to source.
   Does the declarant:
   1) Operate and maintain the source? Yes
   2) Own the land at the source? No
   3) Use the water from this source? Yes
   4) Own the land where the water is being used? No

4. Does anyone else also use water from this source? No
   If yes, is their use included in this user’s declaration?
   Who are the other users? Did they file? NOT APPLICABLE

REMARKS: BHP Petroleum - formally Hawaiian independent Refinery.

VERIFIED BY:  NO  DATE: 3/4/95
July 24, 1985

Hawaiian Independent Refinery

Attention: Mr. William W. Mills

Project: Emergency Firewater Well, WW-1208
Contract ENG 1985-10

Gentleman:

Enclosed please find drawing and data for completion of Foundation International, Inc.'s scope of work at the above captioned location.

I) Existing Casing - Remove and Replaced

II) Well Shaft - Existing Well shaft open to 39'0 feet with approximately 2'0 feet of fragmented coral (fill)

III) Material Samples - samples were taken at
   39'0 feet - fragmented coral (fill)
   43'0 feet - coral w/ clayey sand
   46'0 feet - coral w/ clayey sand
   50'0 feet - coral w/ clayey sand

IV) Water Samples -
   Not available due to heavy contamination of sand/silt as a result of redrilling of open shaft.

V) Advancement of shaft -
   Shaft was drilled to 45'0 feet and belled to 5'0 feet in diameter, due to high rate of sand/silt floatation in water shaft was advanced to 50'0 feet to allow for settlement of same without filling belled area.

VI) Pump Test -
   Pump test was completed with Gorman Rupp 6 inch pump with maximum 2800 GPM capacity.

VII) Results -
   Maximum draw down from elevation -12'0 to -15'0 feet during three separate pump test of 10 minutes each. At completion of each pump test, water level at elevation -12'0 feet or MSL within one minute of termination of pump test.
Remove and Replace
Existing 4' x 4' Steel Plate

Remove and Replace
Existing CS-24 Inch Casing x 6'0" FT.

Remove and Replace
Existing CS-20 Inch Casing x 19'0" FT.

45'0 FT.

5'0 Dia. Bell

5'0 FT.

24 Inch Dia. Shaft
Well 1805-03

BHP PETROLEUM

Installed Randolph vertical turbine capacity 1500 gpm

Diesel engine Caterpillar ser. # 03210312
PERMIT
TO WITHDRAW AND USE GROUND WATER

Applicant: Hawaiian Independent Refinery, Inc.
Address: [Redacted]

Ground Water Control Area: Pearl Harbor
Subarea: Caprock
Well(s) Name: HIRI Well
State Well No.(s): 1805-03

Amount of Withdrawal: (Average Annual) 0 (Max. Day) 1500 gpm

Beneficial Purpose of Withdrawal: Emergency fire fighting

Area or Projects Served: Facility at Campbell Industrial Park

The applicant is hereby granted a permit to withdraw and use ground water from the source identified above, in accordance with Chapter 177, HRS, Administrative Rule, Chapter 166 of Title 13; and the following:

General Conditions. (1) the water use authorized by this permit must be for the beneficial purpose described in this permit; (2) the use must not interfere substantially and materially with existing individual household uses, existing preserved uses, or existing permitted uses; (3) the use is subject to the shortage and emergency powers of the Board of Land and Natural Resources; (4) this permit may be suspended or revoked in accordance with Chapter 166 of Title 13; (5) the permit holder may be required to relinquish this permit at any time or specified time after issuance to the Board of Land and Natural Resources in accordance with Chapter 166 of Title 13; (6) an approved flowmeter(s) must be installed to measure withdrawals; and a record of the withdrawals must be kept and reported to the Department of Land and Natural Resources, Division of Water and Land Development, P.O. Box 373, Honolulu, Hawai'i 96809, on a monthly basis.

Additional Conditions.

The term of this permit shall be twenty years from the date of issuance, subject to review and adjustment every five years.

The issuance of this permit was approved by the Board of Land and Natural Resources at its meeting on October 11, 1985

Chairperson of the Board
Date of Issuance: OCT 18 1985
Chairperson and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Hawaiian Independent Refinery, Inc. Water Use Permit Application, Pearl Harbor Ground Water Control Area, Oahu

Hawaiian Independent Refinery, Inc. (HIRI) has submitted a Water Use Permit application for an emergency fire fighting water supply well at its facility in Campbell Industrial Park. HIRI would pump up to 2.16 mgd (million gallons per day) of brackish caprock water from the Caprock Subarea of the Pearl Harbor Ground Water Control Area for emergency fire fighting only. Since the well will be only used in emergency situations, the average annual allocation will be zero. This well in the Caprock Subarea will not affect the Koolau and Waianae basal aquifers.

RECOMMENDATION:

That the Board approve the issuance of a Water Use Permit to Hawaiian Independent Refinery, Inc. to pump up to 2.16 mgd of brackish caprock water for emergency fire fighting, subject to any special conditions and applicable laws, rules and ordinances.

Respectfully submitted,

MANABU TAGOMORI
Manager-Chief Engineer

APPROVED FOR SUBMITTAL:

SUSUMU ONO, Chairperson

Approved by the Board of Land & Natural Resources at the meeting held on

10-11-85
September 9, 1985

Mr. Chris Jansen  
Environmental Affairs Coordinator  
Hawaiian Independent Refinery, Inc.  

Dear Mr. Jansen:

This is to acknowledge receipt of your application for a Water Use Permit and filing fee for your emergency water supply well at Campbell Industrial Park.

My staff is processing the application and will call you if more information is needed or if there are any questions.

Sincerely,

[Signature]

MANABU TAGOMORI  
Manager-Chief Engineer

ES: ko
DECLARANT (FILE REF.): BHP PETROL

PRESENT: Leonard Young, M. Ohye

LOCATION: TMK 9-1-31:03 Campbell Industrial Park

SOURCE(S): Well 1805-03 (Caprock Source)

USE(S): Emergency fire protection, Hydro-static testing of storage tanks and pipelines.

FIELD NOTES:

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LOCATION: TMK: 9-1-31:03 GPS Latitude 21° 18' 22" Longitude 158° 05' 23"

OWNERSHIP: BHP Petroleum - formerly Hawaiian Independant Refinery, Inc.

CHLORIDES: 2700 ppm (initial) Data from water Declaration.
FIELD INSPECTION INFORMATION CHECKLIST  (Ver 4/3/91)

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   If for livestock, how many and what kind? NOT APPLICABLE
   If for drinking, at how many houses? NOT APPLICABLE
   By how many people? NOT APPLICABLE

3. Is the quantity of water use being measured? No
   If yes, document the location of the measurement point and method of measurement; also get use records if these were not submitted previously.

4. If this person takes from a multi-user pipe or ditch system? NOT APPLICABLE

PART II: WATER SOURCE                Source/Well # 1805-03   Name: Firewell

1. Where does the water come from/what kind of source is this? Brackish Caprock

2. Show the source location on maps, determine latitude and longitude, and document the nature of source development by measurements, sketches, and photographs.
   How is the water taken? Randolph vertical turbine pump-250 h.p., 1760 rpm
   What is the capacity for taking (gpm)? 1500 gpm (according to water declaration)
   How often is it taken (used)? Emergencies, hydro-static testing of storage tanks and pipelines 1-2 times a year.

3. Tax Map Key at the source: 9-1-31:03
   Determine declarant's relation to source.
   Does the declarant:
   1) Operate and maintain the source? Yes
   2) Own the land at the source? No
   3) Use the water from this source? Yes
   4) Own the land where the water is being used? No

4. Does anyone else also use water from this source? No
   If yes, is their use included in this user's declaration?
   Who are the other users? Did they file? NOT APPLICABLE

REMARKS: BHP Petroleum - formally Hawaiian independent Refinery.

VERIFIED BY:  DATE:  3/4/93
July 24, 1985

Hawaiian Independent Refinery

Attention: Mr. William W. Mills

Project: Emergency Firewater Well, WW-1208
Contract ENG 1985-10

Gentleman:

Enclosed please find drawing and data for completion of Foundation International, Inc.'s scope of work at the above captioned location.

I) Existing Casing - Remove and Replaced

II) Well Shaft - Existing Well shaft open to 39'0 feet with approximately 2'0 feet of fragmented coral (fill)

III) Material Samples - samples were taken at
     39'0 feet - fragmented coral (fill)
     43'0 feet - coral w/ clayey sand
     46'0 feet - coral w/ clayey sand
     50'0 feet - coral w/ clayey sand

IV) Water Samples -
    Not available due to heavy contamination of sand/silt as a result of redrilling of open shaft.

V) Advancement of shaft -
    Shaft was drilled to 45'0 feet and belled to 5'0 feet in diameter, due to high rate of sand/silt floatation in water shaft was advanced to 50'0 feet to allow for settlement of same without filling belled area.

VI) Pump Test -
    Pump test was completed with Gorman Rupp 6 inch pump with maximum 2800 GPM capacity.

VII) Results -
    Maximum draw down from elevation -12'0 to -15'0 feet during three separate pump test of 10 minutes each. At completion of each pump test, water level at elevation -12'0 feet or MSL within one minute of termination of pump test.
Remove and Replace
Existing 4 X 4 Steel Plate

Remove and Replace
Existing CS-24 Inch Casing X 6'0 FT.

Remove and Replace
Existing CS-20 Inch Casing X 19'0 FT.

45'0 FT.

5'0 Dia. Bell

5'0 FT.

24 Inch Dia. Shaft
Date of report January 2, 1986
Person filing report Chris Jansen

Hawaiian Independent Refinery, Inc.
NAME Emergency Firewater Well

A. OWNER

91-325 Komohana Street, Ewa Beach, Hawaii
GENERAL LOCATION

Foundation International
DRILLING COMPANY

Watson 3000
TYPE OF RIG

July 19, 1985
COMPLETED DRILLING

STATE
c

DESCRIPTION

10. ft. Bench mark and method used to determine
Height of drilling platform above ground surface

70. ft. below drilling platform.

G. CASING INSTALLED:

19. ft. below drilling platform.

H. ANNULUS: Grouted ft. to ft. below drilling platform.

I. PERMANENT PUMP INSTALLATION:

Pump type, make, serial no.

Caterpillar Model 320BT, 260 H.P.

Motor type, H.P., voltage, r.p.m.

J. INITIAL WATER LEVEL

K. INITIAL CHLORIDE:

HYDROLOGY

J. INITIAL WATER LEVEL

300 ft. below drilling platform. Date of measurement, July 19, 1985

L. PUMPING TESTS:

Sampling Date

M. DRILLER'S LOG:

Depth, ft.

Water Level

0 to 39

Existing hole

39 to 50

Coral w/clayey sand (0')

N. REMARKS:

FOR DRILLER'S USE

INSTRUCTIONS: Send three(3) copies to: Manager-Chief Engineer, Division of Water and Land Development, P. O. Box 373, Honolulu, Hawaii 96809.


FOR OFFICIAL USE

Latitude 21 18 19

Longitude 158 05 25

Well No. 1805-03
TO: Hawaiian Independent Refinery, Inc.

In accordance with Chapter 166 of Title 13, "Rules for the Control of Ground Water Use in the State of Hawaii", your application to drill an emergency fire fighting well (State Well No. 1805-03) at Campbell Industrial Park is approved subject to the following conditions:

1. A Driller's Well Completion Report (form enclosed) shall be submitted to the Division of Water and Land Development within 60 days after completion of the well.

2. Pumping test data shall be submitted to the Division of Water and Land Development within 60 days after testing of the well.

3. The applicant comply with all applicable laws, rules and ordinances.

SUSUMU ONO
Chairperson of the Board

Date of Issuance

10/18/85

Enc. (Driller's Report Form)

cc: USGS
Dept. of Health, Drinking Water Program
Honolulu BWS
FROM: M. TAGOMORI
TO: T. Fujii
PLEASE: Take Action By
REMARKS: Copy and send to D. Pls
Check - Do not hold up processing

DATE: 8/17
FILE IN: ________
Mr. Susumu Ono  
Department of Land and Natural Resources  

Re: Emergency Water Supply Well  

Dear Mr. Ono:

Attached for your consideration is a permit application and a $100 filing fee for an emergency water supply well for the purpose of firefighting at the Hawaiian Independent Refinery, Inc., located in Campbell Industrial Park. The existing well was previously used for hydrotesting tanks at the refinery. However, due to the need to increase flow capacities, it has been modified. The well is located in the brackish caprock area.

A permit application or well certification has not been previously submitted. The water was sampled and tested on July 19, 1985 at the water table. The chloride results were 2700 parts per million.

If there are any questions or further information required, please call me at [redacted].

Sincerely,

Chris Jansen  
Environmental Affairs Coordinator  

CJ/em  
Attachment  

cc: Samuel L. Keala, Jr.  
Campbell Estate  

filing fee deposited - 9/5/85 by DH.
APPLICATION FOR (check one)

☐ WELL DRILLING PERMIT  ☑ WELL MODIFICATION PERMIT

Instructions: Send completed application and attachments to Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

Reference: Regulation 9, Dept. of Land & Natural Resources.

Is the well located in a Designated Ground Water Control Area?  XX Yes  No
If "yes", application must be accompanied by a Water Use and/or Water Supply Permit and a non-refundable filing fee of $100 payable to the Department of Land & Natural Resources. However, if application is for minor modification of well, filing fee may be waived. If "no", no filing fee is required. Filing fee is waived for federal, state, and county government agencies.

1. WELL LOCATION: Island Oahu  Tax Map Key 9-1-31-3  Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER  Hawaiian Independent Refinery, Inc.  Telephone  Address  91-325 Komohana Street, Ewa Beach, Hawaii 96707  Zip Code 96707

3. PROPOSED DRILLING COMPANY: Foundation International, Inc.

4. PROPOSED WORK: ☐ Drill new well  ☑ Deepen  ☑ Redrill  ☑ Alter  ☑ Seal  ☑ Abandon  ☑ Install new pump  ☑ Replace pump  ☑ Modify pump

Fill in the diagram and briefly describe the proposed work (use back of form if necessary):

Existing well shaft was deepened to 45'-0" and belled to 5'-0" in diameter and then shaft was advanced an additional 5'-0" feet.

PROPOSED SECTION OF WELL

<table>
<thead>
<tr>
<th>Elevation at top of casing</th>
<th>12 ft. msl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement Grout</td>
<td>NA ft</td>
</tr>
<tr>
<td>Hole Dia.</td>
<td>24 in</td>
</tr>
<tr>
<td>Total Depth</td>
<td>50 ft</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>NA ft</td>
</tr>
</tbody>
</table>

Steel plate 4'-0" square

Ground Elev. 10 ft. msl

Solid casing:
- Material: Carbon steel
- Length: 6'-0"
- Diameter: 24 in
- Wall thickness: 0.688 in

Solid Casing: ☐ Perforated ☑ Scre
- Material: Carbon steel
- Length: 19'-0"
- Diameter: 20 in
- Wall thickness: 0.594 in
- Openings: NA

Open Hole:
- Length: 27 ft
- Diameter: 24 in
- Belled 5'-0" at 45'-0"

PROPOSED USE:  ☑ Municipal  ☐ Military  ☐ Agriculture  ☐ Industrial  ☐ Domestic  ☐ Disposal  ☐ Other (specify)

PROPOSED AMOUNT OF WITHDRAWAL:  Check most appropriate box and fill in amount.
- Daily gallons
- Monthly gallons
- Yearly gallons

PROPOSED PUMP OR FLOW CAPACITY:
- 1500 (Emergency) gallons per minute

Signature:  (Water User)  Date: 8/1/87

Signature:  (Landowner of Well Site)  Date: 8/15/85

For Official Use:
- State Well No. 1805-03
- DLNR Permit No.
- DLNR Application No.
APPLICATION FOR: (check one)

☐ PERMIT TO WITHDRAW WATER FOR BENEFICIAL USE
☐ PERMIT TO SUPPLY WATER FOR BENEFICIAL USE

Instructions: Fill out, sign, and send application with pertinent attachments to Dept. of Land & Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809. A non-refundable filing fee of $100 is required, excepting military, federal, state, and local government agencies.

1. NAME OF APPLICANT: Hawaiian Independent Refinery, Inc.  Phone:

2. REQUESTED BENEFICIAL USE OF WATER:
☐ Domestic ☐ Municipal ☐ Military ☐ Agricultural ☐ Industrial ☐ Other
Appropriately describe nature and purpose of requested use: Emergency source of water for firefighting

Proposed commencement date of water use: October 1985

3. REQUESTED AMOUNT OF WITHDRAWAL OR SUPPLY:
Average Annual mgd; Maximum Month mgd; Maximum Day mgd
Appropriately describe schedule or times of taking requested withdrawal: For emergency use only

4. NATURE AND TERM OF REQUESTED PERMIT: ☐ Temporary ☐ Permanent
Requested period of permit

5. PROPOSED SOURCE OF WATER SUPPLY:
☐ Existing source ☐ Modification of existing source ☐ New source
Briefly describe existing or proposed source and any related facilities and submit map, plot plan, and plans or drawings of source of supply: 24" Dia x 50'0" Deep (Belled 5'-0" Dia. at 45'-0" deep and advanced 24" Dia. shaft an additional 5'-0"

If construction work is proposed for new or modified existing source, give:
Commencement Date 7/19/85 Completion Date 7/19/85

6. ASSESSMENT OF REQUESTED WATER USE OR SUPPLY
In a separate attachment to this application, applicant must provide a written assessment addressing the desirability of issuing the requested permit, including such considerations as the availability of water, the beneficial purpose of the proposed water use, and the impact, if any, of the proposed water use on existing permitted uses, preserved uses, and individual household uses. See cover letter.

Signature: __________________________ Date: 8/12/85
Water User or Supplier

Signature: __________________________ Date: 
Owner of Water Source

In accordance with Department Regulation No. 9, every permit approved and issued by the Board of Land & Natural Resources shall be for a specified period of time, for a specified beneficial use, subject to suspension and revocation, and subject to the shortage and emergency powers of the Board. Consideration of applications for a permit shall include: availability of water, beneficial purpose of water use, non-impairment of the most beneficial use and development of the water resources in the designated area, and no substantial and material interference with existing uses of water.

For Official Use:
Docket No. 180 180 Days 21/85
Board Approved Disapproved
Well No. 1805-03
BHP Petroleum Americas Refining, Inc.

Leonard K. Young
Environmental Coordinator

Hawaiian Independent Refinery, Inc.

BHP Petroleum
Hawaiian Independent Refinery

Attention: Mr. William W. Mills

Project: Emergency Firewater Well, WW-1208
Contract ENG 1985-10

Gentleman:

Enclosed please find drawing and data for completion of Foundation International, Inc.'s scope of work at the above captioned location.

I) Existing Casing - Remove and Replaced

II) Well Shaft - Existing Well shaft open to 39'0 feet with approximately 2'0 feet of fragmented coral (fill)

III) Material Samples - samples were taken at
   39'0 feet - fragmented coral (fill)
   43'0 feet - coral w/ clayey sand
   46'0 feet - coral w/ clayey sand
   50'0 feet - coral w/ clayey sand

IV) Water Samples -
   Not available due to heavy contamination of sand/silt as a result of redrilling of open shaft.

V) Advancement of shaft -
   Shaft was drilled to 45'0 feet and belled to 5'0 feet in diameter, due to high rate of sand/silt floatation in water shaft was advanced to 50'0 feet to allow for settlement of same without filling belled area.

VI) Pump Test -
   Pump test was completed with Gorman Rupp 6 inch pump with maximum 2800 GPM capacity.

VII) Results -
   Maximum draw down from elevation -12'0 to-15'0 feet during three separate pump test of 10 minutes each. At completion of each pump test, water level at elevation -12'0 feet or MSL within one minute of termination of pump test.

SOIL TESTING • DEWATERING • PREDRILLING • PROBE HOLES • BELLED CAISSONS
VIII) Conclusions -
Firewater well to have capacity of exceeding required 2000 GPM as set forth in contract specifications.

If you have any questions pertaining to the above please feel free to contact me at your convenience.

Sincerely,

Foundation International, Inc.

Gerald D. Konrath, President

CDK: cw
Remove and Replace
Existing 4" x 4" Steel Plate

Remove and Replace
Existing CS-24 Inch Casing x 6'0" FT.

Remove and Replace
Existing CS-20 Inch Casing x 19'0" FT.

45'0" FT.

5'0" Dia. Bell

5'0" FT.

24 Inch Dia. Shaft
TO: Hawaiian Independent Refinery, Inc.

Attention: Mr. Chris Jansen

Your application to drill a back-up wastewater injection well at TMK: 9-1-31:2401B, Campbell Industrial Park, is approved in accordance with Chapter 166 of Title 13, "Rules for the Control of Ground Water Use in the State of Hawaii," subject to the following conditions:

1. No withdrawals of water shall be made from the well.

2. A copy of the driller's logs and a completed Driller's Report form (enclosed) shall be submitted within 60 days after well completion.

3. The chloride content of the well at the water table and at the bottom of the well shall be determined and reported.

4. The applicant shall comply with all applicable rules, ordinances, and laws.

The filing fee for this disposal well is waived.

SUSUMU ONO
Chairperson of the Board

Date of Issuance

9/24/82

log: USGS
DOH
BWS
P13 issue present.

Diff. Page 1.

Should be 14", instead of 11" shown? Opening = 0.8 in LF is obviously incorrect.

May allow for get. longer well, relative shortening and third well (If we don't have any existing data)
September 19, 1983

Mr. Robert T. Chuck  
Manager and Chief Engineer,  
DOWALD  
State of Hawaii  
Department of Land and Natural Resources

Dear Mr. Chuck:

Attached is a Well Drilling Permit Application for a back-up wastewater injection well to be constructed at Hawaiian Independent Refinery, Inc., located in Campbell Industrial Park on Oahu. Two disposal wells currently exist at the facility.

Also included for your information is a copy of HIRI's existing Permit to Operate issued by the State Department of Health under Chapter 38(59) of the Public Health Regulations.

If there are any questions, please do not hesitate to contact me at [redacted].

Sincerely,

[Signature]

Chris Jansen
Environmental Affairs Coordinator

CJ:lw

Enclosures
APPLICATION FOR (check one)

☐ WELL DRILLING PERMIT  ☐ WELL MODIFICATION PERMIT

Instructions: Send completed application and attachments to Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

Reference: Chapter 168, Dept. of Land & Natural Resources.

Is the well located in a Designated Ground Water Control Area?  X Yes  ☐ No

If "Yes", application must be accompanied by a Water Use and/or Water Supply Permit and a non-refundable filing fee of $100 payable to the Department of Land & Natural Resources. However, if application is for minor modification of well, filing fee may be waived. If "No", no filing fee is required. Filing fee is waived for federal, state, and county government agencies.

1. WELL LOCATION: Island Oahu Tax Map Key 9-1-31-2401B. Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER Hawaiian Independent Refinery, Inc. Telephone

3. PROPOSED DRILLING COMPANY: Roscoe - Moss

4. PROPOSED WORK: ☐ Drill new well ☐ Deepen ☐ Redrill ☐ Alter ☐ Seal ☐ Abandon ☐ Install new pump ☐ Replace pump ☐ Modify pump

Fill in the diagram and briefly describe the proposed work (use back of form if necessary):

---

PROPOSED SECTION OF WELL

Elevation at top of casing 12.5 ft. msl.

Cement Grout 75 ft.

Hole Dia. 20 in.

Total Depth 110 ft.

Rock Packing - ft.

Ground Elev. 10 ft. msl*

Solid casing:

Material PVC

Length 65 ft.

Diameter 14 in.

Wall thickness 4.57 ft.

Casing:

Material PVC

Perforated Screen

Length 105 ft.

Diameter 4 in.

Wall thickness 4.5 ft.

Openings 0.8 sq. in./ft.

Discharge fluid tubing

Open Hole

Length 35 ft.

Diameter 12 in.

*Approximate elev. at filing. Final elev. (msl) by a surveyor licensed by the State must be submitted at start of construction.

5. PROPOSED USE: ☐ Municipal ☐ Military ☐ Agriculture ☐ Industrial

☐ Domestic ☐ Disposal ☐ Other (specify) _________

6. PROPOSED AMOUNT OF WITHDRAWAL: Check most appropriate box and fill in amount.

☐ Daily _______ gallons ☐ Monthly _______ gallons ☐ Yearly _______ gallons

7. PROPOSED PUMP OR FLOW CAPACITY: 200 gallons per minute

Signature: Hawaiian Independent Refinery, Inc. Date: 6/24/83

Signature: Roscoe - Moss

For Official Use:

State Well No. 1805-03

DLNR Permit No. _______

DLNR Application No. _______

*Back-up Disposal Well
RECEIVED
14 SEP 20 A 8:45

DIV. OF WATER & LAND DEVELOPMENT

COVER FL OR 14" BLIND FLANGE
CONCRETE CAP (3'-0" x 3'-0" x 1'-0"

3*6 HR. BARS
8*4 VERT BARS

20" Ø HOLE, DRILLED TO 65' DEPTH

14" Ø PVC PIPE, TO 65' DEPTH & CEMENTED TO SURFACE

5' CEMENT PLUG - DRILL THROUGH W/ 1/2" BIT.

-65 FT LEVEL

12" Ø HOLE

2" SCH 40 PVC, STRAPPED OR BANDED TO 4"

-90 FT LEVEL

-100 FT LEVEL

NOTES:

HAWAIIAN INDEPENDENT REFINERY INC.

A PACIFIC RESOURCES, INC. COMPANY
81-329 KOMONANA STREET, EWA BEACH, HAWAII 96706
TELEPHONE (808) 682-4505

W-1201 C
BACK-UP WASTE WATER INJECTION WELL
AUTHORIZATION TO OPERATE
A PRIVATE WASTEWATER TREATMENT WORKS

In compliance with the provisions of Chapter 342, Hawaii Revised Statutes, as amended, and Chapter 38 of Public Health Regulations, Department of Health, State of Hawaii

HAWAIIAN INDEPENDENT REFINERY, INC.

is authorized to operate a private wastewater treatment system located at the Hawaiian Independent Refinery, Inc., 91-325 Komohana Street, Ewa Beach, Oahu,

to discharge treated wastewater into injection wells,

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective upon issuance.

This permit and the authorization to operate shall expire at midnight, April 30, 1986.

Signed this 6th day of August, 1981

(For) Director of Health

PERMIT ISSUED
Date AUG 6 1981
I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS*

During the period beginning the effective date of this permit and lasting through April 30, 1986.

1. Such discharges shall be limited and monitored by the permittee as specified below:

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements***</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kg/day (lbs/day)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daily Average</td>
<td>Daily Max.</td>
</tr>
<tr>
<td>Flow m³/day (MGD)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>BOD₅**</td>
<td>1000</td>
<td>--</td>
</tr>
<tr>
<td>Hexavalent Chromium</td>
<td>0.23</td>
<td>--</td>
</tr>
<tr>
<td>Total Chromium</td>
<td>11</td>
<td>--</td>
</tr>
<tr>
<td>Ammonia (as N)</td>
<td>485</td>
<td>--</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>350</td>
<td>--</td>
</tr>
<tr>
<td>Phenol</td>
<td>12.0</td>
<td>--</td>
</tr>
<tr>
<td>Total Sulfide</td>
<td>10.0</td>
<td>--</td>
</tr>
<tr>
<td>Total Suspended Solids**</td>
<td>448</td>
<td>--</td>
</tr>
</tbody>
</table>

pH: Not less than 6.0 standard units nor greater than 9.0 standard units

*The effluent limitations contained above are based on a present daily average plant production level of 70,000 bbl/day. Any significant increase or decrease in this production level, shall be reported to the Director within one week of its commencement. The Director shall then review this entire permit, in light of the change, to ascertain the appropriateness of the effluent limits contained in this condition and may, if he determines them to be inappropriate, modify them accordingly.

**Both the influent and the effluent shall be monitored.

***The monitoring schedule shall become effective immediately upon the effective date of this permit.

2. Discharges shall not cause objectionable odors at the surface of the receiving waters.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
   Influent samples shall be taken downstream from any additions to the trunk sewer and prior to treatment.
   Effluent samples shall be taken downstream from the treatment works and prior to disposal into injection
B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

   The permittee shall operate in accordance with a wastewater's sludge disposal plan, to be implemented immediately upon the effective date of this permit, which shall include the necessary treatment and transportation of the sludge, assuring that the disposal method will not result in the contamination of underground drinking water sources or surface waters, or create public health hazards, nuisances or vector propagation. Sludge disposal operations shall conform with Section 4.5.c. of Chapter 38, Public Health Regulations.

2. No later than 7 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

3. A "schedule of compliance" means a program composed of two integral parts: (a) plan—description of new or modified facilities to treat and dispose of the effluent; and (b) schedule—a timetable setting forth the date by which all wastewaters will be in compliance with the effluent limitations of this permit. The schedule shall include (if appropriate) dates by which the permittee will accomplish:

   a. Completion of a preliminary engineering plan report;
   b. Completion of construction plans and specifications;
   c. Initiation of construction;
   d. Completion of construction;
   e. Demonstration of compliance with effluent limitations.
C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitoring discharge.

2. Reporting

Monitoring results obtained during the previous three (3) months shall be summarized for each month and submitted on forms to be supplied by the Director, to the extent that the information reported may be entered on the forms. The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this permit. Unless otherwise specified, discharge flows shall be reported in terms of the average flow over each 30-day period and the maximum daily flow over that 30-day period. Monitoring reports shall be postmarked no later than the 28th day of the month following the completed reporting period. The first report is due on November 28, 1981. Signed copies of these, and all other reports required herein, shall be submitted to the Director at the following address:

Director of Health
State Department of Health
Attn: Environmental Protection & Health Services Division
1250 Punchbowl Street
Honolulu, HI 96813

3. Definitions

See Part III.

4. Test Procedures

Test procedures for the analysis of pollutants including handling and preservation of samples shall be performed in accordance with Standard Methods.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date, and time of sampling;

b. The dates the analyses were performed;

c. The person(s) who performed the analyses;

d. The analytical techniques or methods used; and

e. The results of all required analyses.

PENDING ISSUED

Date AUG 2, 1981
6. **Additional Monitoring by Permittee**

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated.

7. **Records Retention**

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Director.
A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, or treatment modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Director with the following information, in writing, within five (5) days of becoming aware of such condition:

a. A description of the discharge and cause of noncompliance; and

b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

Any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall promptly notify the Director in writing of each such diversion or bypass in accordance with the procedure specified in Part II, A.2. above.
6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

7. Safeguards to Electric Power Failure

See Part III—OTHER REQUIREMENTS.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Director, and/or his authorized representatives, upon the presentation of credentials:

a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director.

3. Availability of Reports

Except for data determined to be confidential, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Director. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Chapters 321 and 342, Hawaii Revised Statutes.

4. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any terms or conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully and relevant facts; or

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
PART III OTHER REQUIREMENTS

PART III.A.7. SAFEGUARDS TO ELECTRIC POWER FAILURE

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall:

a) Maintain in good working order an alternate power source sufficient to operate the wastewater control facilities; or if such alternate power source is not in existence, shall:

b) Halt, reduce or otherwise control all discharge upon the reduction, loss or failure of the primary source of power to wastewater control facilities.

PART III.A. REAPPLICATION

If the permittee desires to continue to discharge, he shall reapply not later than 180 days before this permit expires, on the application forms then in use.

PART III.B. DEFINITIONS

1. "Composite Sample" means sample(s) collected on regular intervals in proportion to the existing flow and then combined to form a sample representative of flow over a period of time. For the purposes of this chapter, a composite sample means at least four (4) equally timed grab samples taken over a twelve (12) consecutive hr/day period and proportioned according to the flow rate.

2. A "discrete sample" means an individual sample collected in less than 15 minutes.

PERMIT ISSUED
Dato AUG 6 1981
November 16, 1983

Mr. Robert T. Chuck
Manager and Chief Engineer, DOWALD
State of Hawaii
Department of Land and Natural Resources
P. O. Box 373

Dear Mr. Chuck:

Attached as required is a completed copy of a "Driller's Report" for the permitted back-up wastewater injection well located at Hawaiian Independent Refinery, Inc. at Campbell Industrial Park on Oahu.

If there are any questions, please do not hesitate to call me at [redacted]

Sincerely,

PACIFIC RESOURCES, INC.

Chris Jansen
Environmental Affairs Coordinator

CJ:jt

cc: E. D. Lewis
    L. K. Young
November 16, 1983

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Manager and Chief Engineer, DOWALD
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If there are any questions, please do not hesitate to call me at 547-3422.

Sincerely,

PACIFIC RESOURCES, INC.

Chris Jansen
Environmental Affairs Coordinator

CJ:jt
cc: E. D. Lewis
    L. K. Young
This is a detailed report on a drilling project. The report includes various sections such as the date of the report, the person filing the report, and the well name. It also contains information about the location, type of rig, and elevation. The DRILLER'S LOG section provides details about the installation of casing, the depth of water levels, and the type of perforation. The HYDROLOGY section includes pumping tests with reference points. The SUBSURFACE FORMATION section lists the depth, rock description, and water level. The FOR OFFICIAL USE section includes instructions for mailing the report and references to state regulations. The report also includes latitude and longitude coordinates and well number.
Diesel engine Caterpillar ser. # 03210312

Well 1805-03

Installed Randolph vertical turbine, capacity 1500 gpm
Diesel engine Caterpillar ser. # 03210312

Installed Randolph vertical turbine, capacity 1500 gpm

Well 1805-03