TO: Chevron U.S.A. Inc.
91-480 Malakole Street
Ewa Beach, Hawaii 96707-1883

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 14 oil recovery wells at Tax Map Key: 9-1-15:1 is approved subject to the following conditions:

1. The wells will be used temporarily for oil recovery only.
2. Periodic reports shall be submitted to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809, on the status of the recovery operations.
3. The applicant shall comply with all applicable laws, rules, and ordinances.
4. Upon completion of recovery operations, the wells shall be maintained or abandoned in a manner approved by the Department.

AUG 31 1987

Date of Issuance

cc: USGS
Dept. of Health,
   Drinking Water Program
   Ground Water Protection Program
Honolulu BWS
TO: Chevron U.S.A. Inc.
91-480 Malakole Street
Ewa Beach, Hawaii 96707-1883

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 18 oil recovery wells at Tax Map: 9-1-16:25 is approved subject to the following conditions:

1. The wells will be used temporarily for oil recovery only.
2. Periodic reports shall be submitted to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809, on the status of the recovery operations.
3. The applicant shall comply with all applicable laws, rules, and ordinances.
4. Upon completion of recovery operations, the wells shall be maintained or abandoned in a manner approved by the Department.
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 621
HONOLULU, HAWAII 96809

WELL DRILLING PERMIT
for
Chevron Oil Recovery Well A1
State Well No. 1906-07
Barbers Point, Oahu

TO: Chevron U.S.A. Inc.
91-480 Malakole Street
Ewa Beach, Hawaii 96707-1883

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 oil recovery well at Tax Map Key: 9-1-15:1 is approved subject to the following conditions:

1. The well will be used temporarily for oil recovery only.
2. Periodic reports shall be submitted to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809, on the status of the recovery operations.
3. The applicant shall comply with all applicable laws, rules, and ordinances.
4. Upon completion of recovery operations, the well shall be maintained or abandoned in a manner approved by the Department.

Date of Issuance
cc: USGS
Dept. of Health,
Drinking Water Program
Ground Water Protection Program
Honolulu BWS

WILLIAM W. PATY
Chairperson of the Board
TO: Chevron U.S.A. Inc.
91-480 Malakole Street
Ewa Beach, Hawaii 96707-1883

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 oil recovery well at Tax Map: 9-1-16:25 is approved subject to the following conditions:

1. The well will be used temporarily for oil recovery only.
2. Periodic reports shall be submitted to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809, on the status of the recovery operations.
3. The applicant shall comply with all applicable laws, rules, and ordinances.
4. Upon completion of recovery operations, the well shall be maintained or abandoned in a manner approved by the Department.

Jul 27
JUN-30-1987

Date of Issuance

cc: USGS
Dept. of Health, Drinking Water Program
Ground Water Protection Program
Honolulu BWS

WILLIAM W. PATY
Chairperson of the Board
April 16, 1987

**Attendance**

<table>
<thead>
<tr>
<th>Name</th>
<th>VP</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dan Lum</td>
<td></td>
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<tr>
<td>Bill Harman</td>
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<td>Richard Fujii</td>
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<td>Darwin Chung</td>
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<td>Ed Sakoda</td>
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<td>Vini Carvalho</td>
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<td>Mike Shire</td>
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<tr>
<td>Donald</td>
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<td></td>
<td>682-5711</td>
</tr>
<tr>
<td></td>
<td></td>
<td>682-5711</td>
</tr>
</tbody>
</table>
Oil Refiner

2 pipelines
20 miles long
Black oil / Ranch
White oil line / jet, diesel
Fuel oil / Waiân / Swêhê
Jet, diesel

March 5, 1989

Pipeline east 75% jet

East
1000' long, half under NAS + Canefield
400'-500' W
DTW = 5'-3'

West
1000' long
400'-500' W under Canefield
DTW = 30'
Mike Shue
Jim Carroll
Bill Harman

Osamu Chiy
Roger Fujii

Refining → Downline Han (site)
22 mi pipelines
1 - black oil - ships - HECO Warin
1 - white oil- (diesel, jet, etc.)

Accident causes
5 March - discovery

#1 ran smooth to BP NAS
repair & tested

#2 ran red to CIP
repairs

Reported to:
Nat. Response Ctr.
U.S. E.G.
DOH
DOT (Federal)
EPA
Bill Hammer - C.A. 35 yrs. 4/hr well
GW - 30' deep (#2 site)
1000' x 4-stone wide placing

groundwater 6000 gph (42 yds. cur) 75% jet
Leaking for some time - in cane field
Slow movement - fairly stable
Drain + More - Mesa F.

#1 site @ same size 1000' x 4-500'
1/2 in. BP NWS
53' d/ft

How to extract:
1. Care of depression - not feasible
2. Skimming device
3. Venting of soil
4. Enhanced biodegradability

(at 200 ft)
at #2 24" steel-cased well w/skim device
at #1 16" 8" at pt. of leak (much thicker product)

IN BY 1 MAY - ANAIZITE - EXPAND

Incorpore Anaizite land - OR. Michael Lee
C'le.for: TOC, VOC, BTEX, lead

Permits -
Keep us informed - leak test report
State of Hawaii
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Ms. Rae Loui
Deputy Director
Commission on Water Resource Management

Dear Ms. Loui:

On December 30, 1992 we successfully closed all of the oil recovery and monitoring wells at Recovery Site 1, an area along both sides of Kalaeloa Boulevard (TMK 9-1-15:1 and TMK 9-1-15:12), in an environmentally responsible manner in accordance with the State DLNR-approved closure request (October 1, 1992).

Enclosed is the Well Abandonment Report form completed with pertinent Site 1 closure information and the Site Plan (Drawing HB 523-03) showing the former locations of the oil recovery and monitoring wells. The DLNR-approved well capping profiles used to remove and seal both types of wells formerly located at Site 1 (SK 10-246 for oil recovery wells and Figure 1 for monitoring wells) are also enclosed.

Oahu Sugar Company (OSCo) has cleared the land for sugarcane planting on the TMK 9-1-15:1 (OSCo Field 004) portion and Engineering Concepts is proceeding with business park development on the TMK 9-1-15:12 parcel.

If you have questions concerning this closure report, please contact Mr. Stan Sato at 682-2205.

Very truly yours,

K. O. MOHN

SYS: snl
Enclosures

cc: Mr. Bruce Schlieman
Department of Health
Hazard Evaluation & Emergency Response Office
WELL ABANDONMENT REPORT

Well Name or Location: Oil Recovery & Monitoring Wells - Site 1 (Along Kalaeloa Blvd)

1-32-34 45 (2" Wells)

Date work completed: 12-30-92 Form completed by: Stanley Y. Sato

Land Owner: Campbell Estate

Applicant: Chevron U.S.A. Products Company - Hawaiian Refinery

Drilling Contractor: CMZ Company, Inc.

Finished Grade El.: ___ ft.

Check material used:
☐ Cement
☐ Sand/Cement

Sand/Cement ratio: ___

Measured Depth: ___ ft.
(blank csg.)

Measured Depth: ___ ft.
(bottom of csg.)

Measured Depth: ___ ft.
(top of sandfill)

Measured Depth: ___ ft.
(total depth of well)

* Please refer to attached sketch (SK 10-246) and Figure 1 for above capping dimensions related to oil recovery and monitoring wells respectively.

(Return completed form to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809)
NOTES

1. Steel well casings are to be removed and manufactured rock backfill removed by redrilling the well.

2. All concrete and vent grout shall be applied by tremie tube. Vent seal shall be cured for 48 hours before concrete is applied. Concrete shall be cured for 48 hours prior to final coral backfill.
NOTES

1. PVC well casings are to be removed and vent seal tremied from the bottom of the borehole to the surface.

2. All contaminated material debris will be transferred into polyethylene drums and transported to the refinery to a designated site.

FIGURE 1
SITE 1 MONITORING WELL TYPICAL CONSTRUCTION AND CAPPING PROFILE DIAGRAM
Mr. A. James Wriston, III
Oahu Sugar Company
P. O. Box "O"
Waipahu, HI 96797

Dear Mr. Wriston:

Thank you for your letter informing us that our lease with Oahu Sugar Company is set to terminate April 9, 1992.

It is our intent not to renew the lease since we are initiating closure of all wells located at Site 1 (OSCo. field 004).

We will sample selected monitoring wells at Site 1 within about two weeks and expect analytical results in 10 - 14 days following submission of the groundwater samples to the laboratory. We are working with the State Department of Land and Natural Resources and the Department of Health to properly cap all wells and remove associated oil recovery equipment.

If you have any questions pertaining to this Site 1 closure, please call Mr. Stan Sato at (808) 682-2205.

Very truly yours,

K. O. MOHN

SYS:myw
cc: Mr. Ed Sakoda, DLNR
State Of Hawaii  
Department of Land and Natural Resources  
Attn: Mr. Masanobu Togomori  
Deputy Director  
Commission on Water Resource Management  
P. O. Box 373  
Honolulu, HI 96809

Dear Mr. Togomori:

We have completed closure of all oil recovery wells at the Site 2C Kapolei Village development area (TMK 9-1-16: 23, 25, 27, 31, & 35) in accordance with the State DLNR-approved sketch (enclosed sketch SK 28-244). This sketch shows the oil recovery well capping profile used to remove and seal the recovery wells located at Site 2C.

Also enclosed is Site Plan 28-HB-514 which shows the former locations of these recovery wells. These wells have been capped with consideration given to the State of Hawaii, Housing, Finance and Development Corporation’s plans to install a flood damage control drainage canal to protect the Kapolei Village development area.

If you have any questions concerning this closure report, please contact Mr. Stan Sato at 682-2205.

Very truly yours,

K. O. MOHN

SYS:myw  
Attachments

cc: Mr. George Narca  
State of Hawaii  
Housing, Finance and Development Corporation
WELL ABANDONMENT REPORT

Well Name or Location:  Oil Recovery Wells - Site 2C (Kapolei Development Village)
State Well No.: C 1-5, 7, 8, (Rth Wells)  5-7, 17, 18, 26-30 (2")  Tax Map Key:  9-1-16:23, 25, 27, 31, & 35
Date work completed: 7/19/91  Form completed by: Stanley Y. Sato
Land Owner: Campbell Estate
Applicant: Chevron U.S.A. Inc.
Drilling Contractor: Foundation International, Inc.

Measured Depth: ___ ft. (blank csg.)

Check material used:
☐ Cement
☐ Sand/Cement
Sand/Cement ratio: __/

Measured Depth: ___ ft. (bottom of csg.)

Finished Grade El.: ___ ft.

Measured Depth: ___ ft. (top of sandfill)

Measured Depth: ___ ft. (total depth of well)

*Please refer to attached sketch (SK 28-244) for above capping dimensions.

(Return completed form to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809)
**NOTES**

1. All well casing and manufactured rock backfill is to be removed by redrilling the well.

2. All concrete and vent grout shall be applied by tremmy tube. Vent seal shall be cured for 48 hours before concrete is applied. Concrete for 48 hrs prior to final coral backfill
WELL ABANDONMENT REPORT

Well Name or Location: Oil Recovery Wells - Site 2C (Kapolei Development Village)

State Well No.: C 1-5, 7, R, (R" Wells) 5-7, 17, 18, 26-30 (2")

Date work completed: 7/19/91

Land Owner: Campbell Estate

Applicant: Chevron U.S.A. Inc.

Drilling Contractor: Foundation International, Inc.

Finished Grade El.: __ ft.

Check material used:

☐ Cement
☐ Sand/Cement

Sand/Cement ratio: __/

*Please refer to attached sketch (SK 28-244) for above capping dimensions.

(Return completed form to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809)
NOTES

1. ALL WELL CASING AND MANUFACTURED ROCK BACKFILL IS TO BE REMOVED BY REDRILLING THE WELL.

2. ALL CONCRETE AND VENT GROUT SHALL BE APPLIED BY TREMMY TUBE. VENT SEAL SHALL BE CURED FOR 48 HOURS BEFORE CONCRETE IS APPLIED. CONCRETE FOR 48 HRS PRIOR TO FINAL CORAL BACKFILL.
FOR IMMEDIATE RELEASE: Thursday, February 23, 1989

Contact: Al Zemsky, U.S. EPA
(415) 974-0944

EPA ANNOUNCES GROUNDWATER AGREEMENT WITH CHEVRON AT EWAA BEACH

(San Francisco)--The U.S. Environmental Protection Agency today announced the signing of a consent agreement and final order with Chevron U.S.A., Inc. requiring groundwater investigations at its Campbell Industrial Park refinery at 91-480 Malakole St., in Ewa Beach, Hawaii.

This agreement was negotiated as the result of a complaint issued by EPA against Chevron on August 15, 1988, for violations of the federal Resource Conservation and Recovery Act (RCRA).

Under terms of the agreement, Chevron will pay a penalty of $27,500 and perform groundwater investigation activities specified in the company's land treatment demonstration permit, which allows the facility to subject various oil refinery wastes to a biodegradation process. These activities include an additional hydrogeologic characterization study, installation of additional monitoring wells, revision of sampling and analysis procedures and accelerated sampling and analysis of new monitoring wells.

The Chevron Campbell Industrial Park facility was evaluated by the National Hazardous Waste Groundwater Task Force in February and May of 1987. The facility was one of 58 investigated nationwide. The Task Force issued a report in August 1988, which coincided with an evaluation of Chevron's RCRA application for a land treatment demonstration permit, and identified deficiencies in the facility's hydrogeologic characterization and groundwater monitoring system.

# # #
May 17, 1988

Mr. K.O. Mohn  
Chevron U.S.A. Inc.  
P.O. Box 29789  
Honolulu, Hawaii  96820

Dear Mr. Mohn:

Thank you for sending us information on your continued mitigation efforts on oil spills at Barber's Point.

Your efforts are commendable and we look forward to a successful completion of the project.

Sincerely,

/s/ Manabu Tagomori

MANABU TAGOMORI  
Deputy for Water Resource Management

MT: ssk
May 17, 1988

Mr. K.O. Mohn
Chevron U.S.A. Inc.
P.O. Box 29789
Honolulu, Hawaii 96820

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Your efforts are commendable and we look forward to a successful completion of the project.

Sincerely,

/s/ Manabu Tagomori

MANABU TAGOMORI
Deputy for Water Resource Management

MT:ssk
May 11, 1988

Manabu Tagomori, Manager-Chief Engineer
State of Hawaii
Department of Land and Natural Resources
Division of Water and Land Development
P. O. Box 373
Honolulu, HI 96809

Dear Mr. Tagomori:

As an update of our continuing efforts to mitigate the effects of last year's pipeline spills we are attaching drawings of each site. We have extracted a total of more than 40,000 gallons of product from these two sites.

The estimated location of the free hydrocarbon plumes is shown as a solid line on both drawings as opposed to the dotted line which represents the plume limits in October 1987. The plumes now have complete lateral stabilization and are shrinking in size as we continue our recovery efforts. The maximum depth of free hydrocarbon now appears to be less than one inch.

We plan to continue pumping with the existing equipment for the remainder of 1988 or until free hydrocarbon is no longer available at the individual recovery well locations. We will keep you informed of any changes in these plans.

In the meantime, if you have any questions please contact Mr. K. P. Beasley at 682-5711.

Very truly yours,

K. O. MOHN

WNH:ess
Attachments
**DIVISION OF WATER AND LAND DEVELOPMENT**

<table>
<thead>
<tr>
<th>FROM:</th>
<th>DATE:</th>
<th>FILE IN:</th>
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<th>TO:</th>
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<td></td>
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<td>G. Matsumoto</td>
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<td>L. Chang</td>
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<td>G. Akita</td>
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<td>D. Lum</td>
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<td>S. Miyamoto</td>
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<td>S. Samuels</td>
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<td>P. Haraguchi</td>
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<td>N. Imada</td>
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<td>P. Matsuo</td>
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<td>R. Suzuki</td>
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<td>See Me</td>
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<tr>
<td>Take Action By</td>
</tr>
<tr>
<td>Route to Your Branch</td>
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<tr>
<td>Dan - is this info also been sent to DOH? 7:40am.</td>
</tr>
<tr>
<td>No, they said on this master tape from the beginning.</td>
</tr>
</tbody>
</table>

Handwritten Additional Notes:
- DOH (GW) Prof. Strategy keeps this in Memo folder.
- [Redacted] requested that we send them monitoring info.
Manabu Tagomori, Manager-Chief Engineer
State of Hawaii
Department of Land and Natural Resources
Division of Water and Land Development
P. O. Box 373
Honolulu, HI 96809

Dear Mr. Tagomori:

The results of groundwater testing at our product recovery sites are attached for your information. This supplements the information originally provided to your office on July 13, 1987.

Groundwater from 23 wells has been sampled and analyzed for BTX (benzene, toluene, and xylene). The attached spreadsheet shows the results of sampling in May, July, August and November. We plan to analyze the saline groundwater for BTX quarterly in 1988.

If you have any questions concerning our ongoing recovery efforts, please contact Mr. Jim Kluksdahl at 682-5711.

Very truly yours,

[Signature]

K. O. MOHN

JHK:ess
Attachment
## CHEVRON U.S.A. INC.
**PRODUCT RECOVERY PROJECT**
**1987 GROUNDWATER BTX TESTING**
**(PARTS PER MILLION)**

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<th>WELL</th>
<th>MAY 11</th>
<th>JULY 1</th>
<th>AUGUST 14</th>
<th>NOVEMBER 11</th>
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<tr>
<td></td>
<td>B</td>
<td>T</td>
<td>X</td>
<td>B</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>22</td>
<td>0.16</td>
<td>1.9</td>
<td>0.19</td>
<td>ND</td>
</tr>
<tr>
<td>20</td>
<td>4.10</td>
<td>20.00</td>
<td>0.87</td>
<td>ND</td>
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<tr>
<td>21</td>
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<td>0.55</td>
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<td>0.14</td>
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<tr>
<td>25</td>
<td>2.0</td>
<td>11.0</td>
<td>1.10</td>
<td>0.81</td>
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</table>

| SITE 2: | | | |
| 2     | 0.8    | 2.9    | 0.3       | 0.45        | 7.60 | 0.60 | ND | 20.00 | ND | ND | ND | ND | ND | ND | ND |
| 6     | 0.5    | 1.9    | 0.2       | 0.38        | 1.80 | 0.37 | ND | 1.6 | ND | ND | ND | ND | ND | ND | ND |
| 7     | ND     | ND     | ND        | ND          | 0.89 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 11    | 0.3    | 0.7    | 0.8       | 0.24        | 1.50 | 0.48 | ND | 4.2 | 1.8 | ND | ND | ND | ND | ND | ND |
| 14    | 0.9    | 2.6    | 0.3       | ND          | ND | 0.31 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 16    | 1.8    | 4.2    | 0.03      | ND          | ND | 1.40 | 0.92 | ND | 1.2 | ND | ND | ND | ND | ND | ND |
| 19    | 0.98   | 5.00   | 1.60      | 0.19        | 1.10 | 0.31 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 20    | ND     | 0.27   | ND        | ND          | ND | 1.40 | 0.92 | ND | 1.2 | ND | ND | ND | ND | ND | ND | ND |

*ND=Not Detectable*
Manabu Tagomori, Manager-Chief Engineer  
State of Hawaii  
Department of Land and Natural Resources  
Division of Water and Land Development  
P. O. Box 373  
Honolulu, HI 96809

Dear Mr. Tagomori:

As requested in your letter of September 1, 1987 we are enclosing for your files the drawing entitled, "Proposed Recovery Wells – Site 2, Revision 1".

The recovery wells have now been installed at both Site 1 and Site 2 and are located as shown on the enclosed drawings 28-HB-513 and 28-HB-514. We are now in the process of placing the recovery wells in service and all wells should be fully operational by November 1, 1987. The drawings also show the approximate boundaries of the hydrocarbon plumes at both locations. You will note that the downgradient movement is considerably slower now than it was earlier in the year. We anticipate that the expanded recovery effort will further inhibit plume movement.

As a permit condition we will be submitting periodic reports to you on the status of the recovery operations.

Very truly yours,

K. O. MOHN

WNH:ess  
Enclosures
September 1, 1987

Chevron U.S.A., Inc.
91-480 Malakole Street
Ewa Beach, Hawaii 96707-1883

Gentlemen:

Enclosed are the permits for your oil recovery wells at Sites 1 and 2 in the Barbers Point area.

We received the drawing titled "Proposed Recovery Wells - Site 1, Revision 1", but did not receive "Proposed Recovery Wells - Site 2, Revision 1". Please send the latter to us at your earliest convenience.

Thank you for your cooperation.

Sincerely,

MANABU TAGOMORI
Manager-Chief Engineer

ES:dh
Enc.
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?  ☐ 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 9-1-15.1. Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER  Chevron U.S.A. Inc. Telephone  682-5711
   Address  91-480 Malakole Street, Ewa Beach, Hawaii  Zip Code  96707-1883

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):

This application is for 14 wells described below at Site 1. Locations are shown on drawing titled "Proposed Recovery Wells - Site 1 Revision 1" dated July 8, 1987. Downhole pump will extract hydrocarbons only.

PROPOSED SECTION OF WELL

<table>
<thead>
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<th>Material</th>
<th>Length</th>
<th>Diameter</th>
<th>Wall thickness</th>
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<tbody>
<tr>
<td>PVC</td>
<td>30 ft</td>
<td>8 in</td>
<td>Sch 40</td>
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<tr>
<td>Stainless steel</td>
<td>5 ft</td>
<td>8 in</td>
<td>.125 in</td>
</tr>
</tbody>
</table>

5. PROPOSED USE:  ☐ Municipal  ☐ Military  ☐ Agriculture  ☐ Industrial  ☐ Domestic  ☐ Disposal  ☐ Other (specify)  ☐ No water withdrawal

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: Less than 1 gpm hydrocarbons gallons per minute

Signature:  [Signature]
Water User, K. O. Mohn, Manager, Hawaiian Refinery
Date:  7/22/87

Signature:  [Signature]
Landowner of Well Site
Date:  

For Official Use:

State Well No.  
DLNR Permit No.  
DLNR Application No.  
APPLICATION FOR (check one)

XX WELL DRILLING PERMIT  O 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?  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 9-1-16.25 Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER Chevron U.S.A. Inc. Telephone 682-5711 Address 91-480 Malakole Street, Ewa Beach, Hawaii Zip Code 96707-1883

3. PROPOSED DRILLING COMPANY: Foundation International Inc.

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

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

This application is for 18 wells described below at Site 2. Locations are shown on drawing entitled "Proposed Recovery Wells - Site 2 Revision 1" dated July 8, 1987. Downhole pump will extract only hydrocarbons.

PROPOSED SECTION OF WELL

Elevation at top of casing  51+ ft. msl.

Ground Elev. 52+ (ft., msl)*

Cement Grout 2 ft.

Solid casing: PVC

Material 50 ft.

Length 8 in.

Diameter 40 in.

Wall thickness

Casing: Perforated Scre

Material 316 stainless steel

Length 3-0" ft.

Diameter 8 in.

Wall thickness .125 in.

Openings 0.020 sq. in. \( \rightangle \)

5' PVC casing below screen

Open Hole: Length None in.

Diameter in.

PROPOSED USE:  O Municipal O Military O Agriculture O Industrial

O Domestic O Disposal O Other (specify) No water withdrawal

hydrocarbons only

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

O Daily _____ gallons  O Monthly _____ gallons  O Yearly _____ gallons

PROPOSED PUMP OR FLOW CAPACITY: Less than 1 gpm hydrocarbons

gallons per minute

Signature: K. O. Mohn, Manager, Hawaiian Refinery

Date: 7/1/87

Signature:  

For Official Use:  

State Well No.  

DLNR Permit No.  

DLNR Application No.
<table>
<thead>
<tr>
<th>TO</th>
<th>INITIAL</th>
<th>PLEASE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. TAGOMORI</td>
<td></td>
<td>See Me</td>
<td></td>
</tr>
<tr>
<td>G. Matsumoto</td>
<td></td>
<td>Take Action By</td>
<td></td>
</tr>
<tr>
<td>L. Chang</td>
<td></td>
<td>Route to Your Branch</td>
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<td>G. Akita</td>
<td></td>
<td>Review &amp; Comment</td>
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<tr>
<td>D. Lum</td>
<td></td>
<td>Draft Reply By</td>
<td></td>
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<tr>
<td>S. Miyamoto</td>
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<td>Acknowledge Receipt</td>
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<td>N. Kaneshiro</td>
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<td></td>
<td></td>
<td>For Information</td>
<td></td>
</tr>
</tbody>
</table>

FOR INFORMATION:
- S. Kokubun
- D. Hamada
- L. Nanbu
- F. Ching
July 17, 1987

Manabu Tagomori, Manager-Chief Engineer
State of Hawaii
Department of Land and Natural Resources
Division of Water and Land Development
P. O. Box 373
Honolulu, HI 96809

Dear Mr. Tagomori:

We are planning to proceed with the installation of 32 recovery wells at our Site 1 and Site 2 locations as previously defined to you. Attached are maps showing the proposed well locations with individual well designations. Also attached are two application forms - one for the 14 wells at Site 1 and one for 18 Site 2 wells.

We plan to begin drilling the wells during the week of August 3 and completing the operation by August 19. We would appreciate your prompt consideration of our applications.

At Site 2 we need to cross the State-owned railroad right-of-way to provide power and air to the Northerly recovery wells. We are making easement and permit applications to Morris A. Arakaki, Permits Engineer, Highways Division, Department of Transportation. As part of the procedure he requires a letter from your office substantiating our need for such a crossing. Would you please provide this document.

It appears that the time required in obtaining this easement and permit could be the sole reason we can't move quickly to begin recovery in the Northerly sector of Site 2. We would therefore appreciate any efforts that your office could make in our behalf to accelerate this process.

Very truly yours,

K. O. MOHN

WNH:ess
Attachments
DIVISION OF WATER AND LAND DEVELOPMENT

FROM: [Signature]   DATE: 7/23   FILE IN: 

TO: INITIAL:       PLEASE:       REMARKS:       

M. TAGOMORI  See Me  Remarks:  
G. Matsumoto  Take Action By  
L. Chang  Route to Your Branch  
G. Akita  Review & Comment  
D. Lum  Draft Reply By  
S. Miyamoto  Acknowledge Receipt  
S. Samuels  Xerox copies  
N. Imada  Return  
P. Matsuo  File  
N. Kaneshiro  Mail  
S. Kokubun  For Information  
D. Hamada  [Handwritten: Ed file w/o recovery report]  
L. Nanbu  Morris Arakaki ph. 348-7987. 
F. Ching  called 7/30/87 sick leave  

Checked with Sam Keala on field visit to desalting plant site. 
7/31/87 - not near plant site, on the other side of BPNAS.
July 17, 1987

Morris A. Arakaki, Permits Engineer  
State of Hawaii  
Dept. of Transportation - Highways Division  
Construction & Maintenance Branch  
869 Punchbowl Street  
Honolulu, HI 96813  

Dear Mr. Arakaki:

As a result of your meeting with Mr. W. N. Harman on July 15 we would now like to formalize our permit application to cross the State-owned railroad, one mile east of the Barbers Point Naval Air Station main gate. Attached drawings show: (1) General area location, (2) Location in relation to the survey and system, and (3) Construction details.

As you are aware, this crossing is required for a power cable and an air line to enable us to recover hydrocarbons on the groundwater in the area north of the railroad tracks. Our construction plan is to begin the recovery operation by September 1. Therefore, we would need to have our permit and easement approval for this crossing by August 10, 1987 in order to meet our schedule. As you can appreciate, it is important from an environmental standpoint that we commence this operation as soon as possible.

You will note that we can either provide an overhead crossing or a bored underground crossing whichever best meets your needs. We anticipate this crossing will be required for a period of from two to five years after which it will be removed.

We would also appreciate your initiating contact with your land and right-of-way people so that the easement procedure can be expedited.

Feel free to contact Mr. W. N. Harman at 682-5711 if you have any questions or if additional information is required.

Very truly yours,

K. O. MOHN

cc: Manabu Tagomori, Manager-Chief Engineer - w/o attachment  
Dept. of Land and Natural Resources
DIVISION OF WATER AND LAND DEVELOPMENT

FROM: [Blank]
DATE: 7
FILE IN: [Blank]

TO: INITIAL:

PLEASE:

M. TAGOMORI  
G. Matsumoto  
L. Chang  
G. Akita  
D. Lum  
S. Miyamoto  
S. Samuels  
N. Imada  
P. Matsuo

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

REMARKS:

POO Y. LIM

True that future applications by Chevron will not require landowner's signature or see Z.

AGM

For Information

Ed.
June 25, 1987

Manabu Tagomori, Manager-Chief Engineer  
State of Hawaii  
Department of Land and Natural Resources  
Division of Water and Land Development  
P. O. Box 373  
Honolulu, HI 96809  

Dear Mr. Tagomori:

As you are aware, we are currently engaged in area definitions and recovery of leaked light hydrocarbons which are in a phase separated state on the surface of the groundwater at two locations. Our Site 1 location is adjacent to Kalaeloa Blvd. near the Campbell Industrial Park entrance. Site 2 is located adjacent to the Barbers Point Naval Air Station about two miles east of the main station entrance.

As a result of our April 16, 1987 meeting with Dan Lum and Ed Sakoda, plus subsequent conversations with Dan, our understanding of the recovery and monitoring well reporting and permitting procedure is as follows:

1) We will supply current surveyed locations on all wells. The attached maps show all monitoring wells drilled to date.

2) Since no liquid is extracted from the two-inch diameter monitoring wells no official permit would be required. We will update your office on any new wells drilled.

3) The attached maps also show the locations of two recovery wells, one at each site, which have already been drilled. Attached are permit applications for these two wells which will be extracting hydrocarbons only. In the future we will submit applications before drilling commences. It is our understanding that future applications will not require the land owner's signature and that no fee will be charged.

Please contact Mr. W. N. Harman at 682-5711 if there are any comments on the statements above.

Per Dan Lum's request we will be forwarding the results of our initial groundwater testing by Industrial Analytical Laboratory. We expect to receive the final report in the next few days.

Very truly yours,

K. O. MOHN

WNH:ess  
Attachments – as noted
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?  

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 9-1-16:25  
Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER  
Chevron U.S.A. Inc.  
Address 91-480 Malakole Street, Ewa Beach, Hawaii  
Telephone 682-5711  
Zip Code 96707-1883

3. PROPOSED DRILLING COMPANY: Foundation International

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

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

A 24" diameter hole 40 ft. deep will be drilled. A P.V.C. 6" Sch. 40 casing will be placed in the hole.

Number 2 rock will be used to backfill around the casing. The well will be used for oil recovery and very little, if any, water will be pumped from the well. If you have any further questions about the design of this recovery well please contact Mr. Kim Beasley at 682-5711.

5. PROPOSED SECTION OF WELL

- Cement  
- Grout  
- N/A  
- Hole  
- Dia. 24 in.  
- Total Depth 60 ft.  
- Rock Packing 60 ft.

*See reverse side regarding filing fee.

6. PROPOSED USE:  
X Municipal  
D Military  
D Agriculture  
D Industrial  
D Domestic  
D Disposal  
D Other (specify) Oil Recovery

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

- Daily  
- Monthly  
- Yearly  
- Nil

8. PROPOSED PUMP OR FLOW CAPACITY:  
0 gallons per minute

Signature:  
Date:

For Official Use:

State Well No.  
DLNR Permit No.  
DLNR Application No.
*The filing fee has not been included upon instructions from Mr. Lum of your department.
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?  ☐ 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  9-1-15:1. Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER  Chevron U.S.A. Inc.   Telephone  682-5711

Address  91-480 Malakole Street, Ewa Beach, Hawaii  Zip Code 96707-1883

3. PROPOSED DRILLING COMPANY: Foundation International

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):

A 36" diameter hole 40 ft. deep will be drilled. A single 24" carbon steel well casing 42 ft. long will be placed in the hole. Number 2 rock will be used to backfill around the casing. The well will be used for oil recovery and very little, if any, water will be pumped from the well.

If you have any further questions about the design of this recovery well, please contact Kim Beasly at 682-5711.

PROPOSED SECTION OF WELL

*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) ☐ Oil Recovery

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: 0 gallons per minute

Signature: [Signature]

Date: [Date]

For Official Use:

State Well No.  1906-07

DLNR Permit No.

DLNR Application No.
*The filing fee has not been included upon instructions from Mr. Lum of your department.
5/29/87

682-5711 ext 270

Bill Harmon called (Chieffon Special)
Skimming devices installed at both sites.

Site 1 (Ewa) recovering 90 gpd
Site 2 (East) recovering amount undetermined.
April 16, 1987

MEMORANDUM FOR THE RECORD

FROM: Ed Sakoda

SUBJECT: Chevron Refinery Pipeline Spill

On April 16, 1987, the following met in the DOWALD conference room to discuss the subject spill:

Mike Shire
Virg Carvalho
Bill Harman
Richard Fujii
Darwin Ching
Dan Lum
Ed Sakoda

Chevron, Hawaiian Refinery
" 
" 
Honolulu BWS
" 
DOWALD

PIPEDINE INFORMATION:
Installed in 1961 from refinery to downtown Honolulu
22 miles long
2 lines: Black oil line (oil for ships & HECO Waiau)
White oil line (diesel, jet, motor fuels)

SPILL INFORMATION:
An accounting discrepancy between the refinery and the downtown end of the line was noted on March 5, 1987.
The following spill areas were located and repaired:

East Spill
Near entrance of Barbers Point Naval Air Station
Approximately 1000' long x 400-500' wide
58' depth to water
Plume on Barbers Point NAS and cane fields

West Spill
On Kalaeloa Blvd. near Malakole Road
Approximately 1000' long x 400-500' wide
30' depth to water
6000 barrels (42 gals/bbl) @ 75% jet fuel
Plume is fairly stable; slow movement
Plume mainly under cane fields

AGENCIES NOTIFIED:
National Response Center
Dept. of Transportation (Federal)
U.S. Coast Guard
BWS
EPA
DLNR
Dept. of Health

On 5-15-87
gave copy of memo
& was to “Uraka”
CLEANUP PLANS:

- East spill: an 8" skimming well will be tested and evaluated.
- West spill: a 24" skimming well will be tested and evaluated.
- Results from the two tests will determine further action to be taken.

FOLLOWUP:

- Chevron will fill out well drilling permit applications for the two skimming wells and for the 2-inch PVC test holes.
- Chevron will keep us informed of their cleanup plans and will supply us with lab test data.
- Dames and Moore (Masa Fujioka) has been contacted to oversee the cleanup.

ED SAKODA

ES: dh