

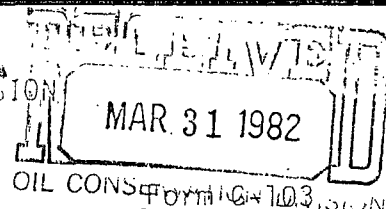
GTLT - ____7____

**14-26S-20W
Chevron U.S.A. Inc.
(Hidalgo County)**

179-N(PA)

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J.S.G.S.	
Operator	
and Office	

MEXICO OIL CONSERVATION COMMISSION
P.O. Box 2088, Santa Fe 87501



SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

State	<input type="checkbox"/>	Fee	<input checked="" type="checkbox"/>
5. State Lease No.			

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE APPLICATION FOR PERMIT "A" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL <input type="checkbox"/>	GAS WELL <input type="checkbox"/>	OTHER: <u>Geothermal Temperature Observation</u>
Name of Operator		
<u>Chevron U.S.A. Inc./Chevron Resources Company</u>		
Address of Operator		
<u>P.O. Box 3722, San Francisco, CA 94119</u>		
Location of Well		
UNIT LETTER <u>N</u>	<u>500</u>	FEET FROM THE <u>N</u> LINE AND <u>1900</u> FEET FROM
THE <u>W</u> LINE, SECTION <u>14</u>	TOWNSHIP <u>26S</u>	RANGE <u>20W</u> N.M.P.M.

7. Unit Agreement Name
8. Farm or Lease Name
<u>Wamel, R.H.</u>
9. Well No.
<u>179</u>
10. Field and Pool, or Wildcat
<u>Wildcat</u>
12. County
<u>Hidalgo</u>

15. Elevation (Show whether DF, RT, GR, etc.)
<u>4274' GR</u>

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK	<input type="checkbox"/>
TEMPORARILY ABANDON	<input type="checkbox"/>
WELL OR ALTER CASING	<input type="checkbox"/>
OTHER	<input type="checkbox"/>

PLUG AND ABANDON	<input checked="" type="checkbox"/>
CHANGE PLANS	<input type="checkbox"/>
OTHER	<input type="checkbox"/>

REMEDIAL WORK	<input type="checkbox"/>
COMMENCE DRILLING OPS.	<input type="checkbox"/>
CASING TEST AND CEMENT JOBS	<input type="checkbox"/>
OTHER	<input type="checkbox"/>

ALTERING CASING	<input type="checkbox"/>
PLUG AND ABANDONMENT	<input type="checkbox"/>

7. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 203.

Temperature observation hole was completed and abandoned March 11, 1980.

8. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED M. Echaz TITLE Permit Representative DATE 8/28/81

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

GEOHERMAL RESOURCES WELL LOG

Operator Chevron U.S.A. Inc./Chevron Resources Company
Address P.O. Box 3722, San Francisco, CA 94119
Reservoir Unknown
Lease Name R. H. Wamel Well No. 179 Unit Letter N
Location: 500 feet from the N line and
1900 feet from the W line Section 14
Township 26S Range 20W County Hidalgo

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Formation	Bottom of Formation				
-0	840'				Qt. Alluvium

Attach Additional Sheets if Necessary

This form must be accompanied by copies of electric logs, directional surveys, physical or chemical logs, water analyses, tests, including potential tests, and temperature surveys (See Rule 205).

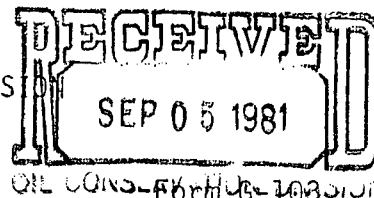
CERTIFICATION

I hereby certify that the information given above and the data and material attached hereto are true and complete to the best of my knowledge and belief.

Signed M. H. Schae Position Permit Rep. Date 8/28/81

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Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501



SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

5a. Indicate Type of Lease
State ☐ Fee ☒
5. State Lease No.

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM G-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- <u>Geothermal Temperature Observation</u>	7. Unit Agreement Name
2. Name of Operator <u>Chevron U.S.A. Inc./Chevron Resources Company</u>	8. Farm or Lease Name <u>Wamel, R.H.</u>
3. Address of Operator <u>P.O. Box 3722, San Francisco, CA 94119</u>	9. Well No. <u>179</u>
4. Location of Well UNIT LETTER <u>N</u> <u>500</u> FEET FROM THE <u>N</u> LINE AND <u>1900</u> FEET FROM THE <u>W</u> LINE, SECTION <u>14</u> TOWNSHIP <u>26S</u> RANGE <u>20W</u> N.M.P.M.	10. Field and Pool, or Wildcat <u>Wildcat</u>
15. Elevation (Show whether DF, RT, GR, etc.) <u>4274' GR</u>	12. County <u>Hidalgo</u>

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER ☐

PLUG AND ABANDON ☒
CHANGE PLANS ☐
OTHER ☐

REMEDIAL WORK ☐
COMMENCE DRILLING OPERATIONS ☐
CASING TEST AND CEMENT JOBS ☐
OTHER ☐
ALTERING CASING ☐
PLUG AND ABANDONMENT ☐

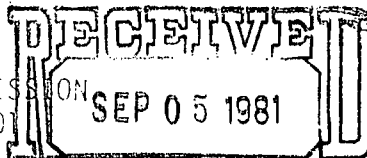
17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE ~~400~~ 203.

Temperature observation hole was completed and abandoned March 11, 1980.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Mark Kichor TITLE Permit Representative DATE 8/28/81
APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9-5-81
CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
P.O. Box 2038, Santa Fe 87501



Form G-105

GEOHERMAL RESOURCES WELL LOG OIL CONSERVATION DIVISION
SANTA FE

Operator Chevron U.S.A. Inc./Chevron Resources Company
Address P.O. Box 3722, San Francisco, CA 94119
Reservoir Unknown
Lease Name R. H. Wamel Well No. 179 Unit Letter N
Location: 500 feet from the N line and
1900 feet from the W line Section 14
Township 26S Range 20W County Hidalgo

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
-0	840'				Qt. Alluvium

Attach Additional Sheets if Necessary

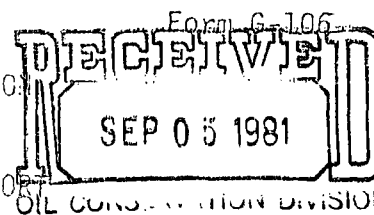
This form must be accompanied by copies of electric logs, directional surveys, physical or chemical logs, water analyses, tests, including potential tests, and temperature surveys (See Rule 205).

CERTIFICATION

I hereby certify that the information given above and the data and material attached hereto are true and complete to the best of my knowledge and belief.

Signed Mark Fisher Position Permit Rep. Date 8/28/81

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501



GEOHERMAL RESOURCES WELL SUMMARY REPORT

Operator Chevron U.S.A. Inc. Address P.O. Box 3722, San Francisco, CA
Lease Name R. H. Wame Well No. 176
Unit Letter N Sec. 14 Twp. 26S Rge 20W
Reservoir Unknown County Hidalgo

Commenced drilling 12/11/79 GEOLOGICAL MARKERS DEPTH
Completed drilling 12/19/79
Total depth 840 Plugged depth
Junk
Commenced producing (Date) Geologic age at total depth:

Date	Static test		Production Test Data									
	Shut-in well head		Total Mass Flow Data					Separator Data				
	Temp. °F	Pres. Psig	Lbs/Hr	Temp. °F	Pres. Psig	Enthalpy	Orifice	Water cuft/Hr	Steam Lbs/Hr	Pres. Psig	Temp. °F	

CASING RECORD (Present Hole)

Size of Casing (A.P.I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Drilled	Number of Sacks of Cement	Depth of Cement through per

PERFORATED CASING

(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

Was analysis of effluent made? No Electrical log depths 840' Temperature log depths 840'

CERTIFICATION

I hereby certify that the information given above and the data and material attached hereto are true and complete to the best of my knowledge and belief.

Signed Mark L. Lohr Position Permit Rep. Date 8/28/81

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-101

APPLICATION FOR PERMIT TO DRILL, DEEPEN,
OR PLUG BACK---GEOTHERMAL RESOURCES WELL

5A. Indicate Type of Lease STATE <input type="checkbox"/> USA <input checked="" type="checkbox"/>	
5. State Lease No. USA NM 20620	
7. Unit Agreement Name	
8. Farm or Lease Name R. H. Wamel	
9. Well No. 179	
10. Field and Pool, or Wildcat Lordsburg	
12. County Hidalgo	
19. Proposed Depth 1000'	19A. Formation
20. Rotary or C.T. Rotary	
21A. Kind & Status Plug. Bond	21B. Drilling Contractor L. Johnson
22. Approx. Date Work will start Dec. 1, 1979	

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M.B.M.	<input type="checkbox"/>
S.G.S.	<input type="checkbox"/>
Operator	<input type="checkbox"/>
and Office	<input type="checkbox"/>

Type of Work	Drill <input checked="" type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/>
Type of Well	Geothermal Producer <input type="checkbox"/> Temp Observation <input checked="" type="checkbox"/> Low-Temp Thermal <input type="checkbox"/> Injection/Disposal <input type="checkbox"/>
Name of Operator	Chevron U.S.A. Inc.
Address of Operator	P. O. Box 3722, San Francisco, CA 94119
Location of Well	UNIT LETTER <u>N</u> LOCATED <u>500</u> FEET FROM THE <u>N</u> LINE <u>1900</u> FEET FROM THE <u>W</u> LINE OF SEC. <u>14</u> TWP. <u>26 S</u> RGE. <u>20 W</u> NMPM
Elevations (Show whether D.F., R.T., etc.)	4274

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
6"	1"		Total Depth		

(See attached Plan of Operations)

ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

By J. F. Turner Title Attorney-In-Fact Date Oct. 18, 1979
(This space for State Use)

PROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 11/30/79

COPIES OF APPROVAL, IF ANY

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

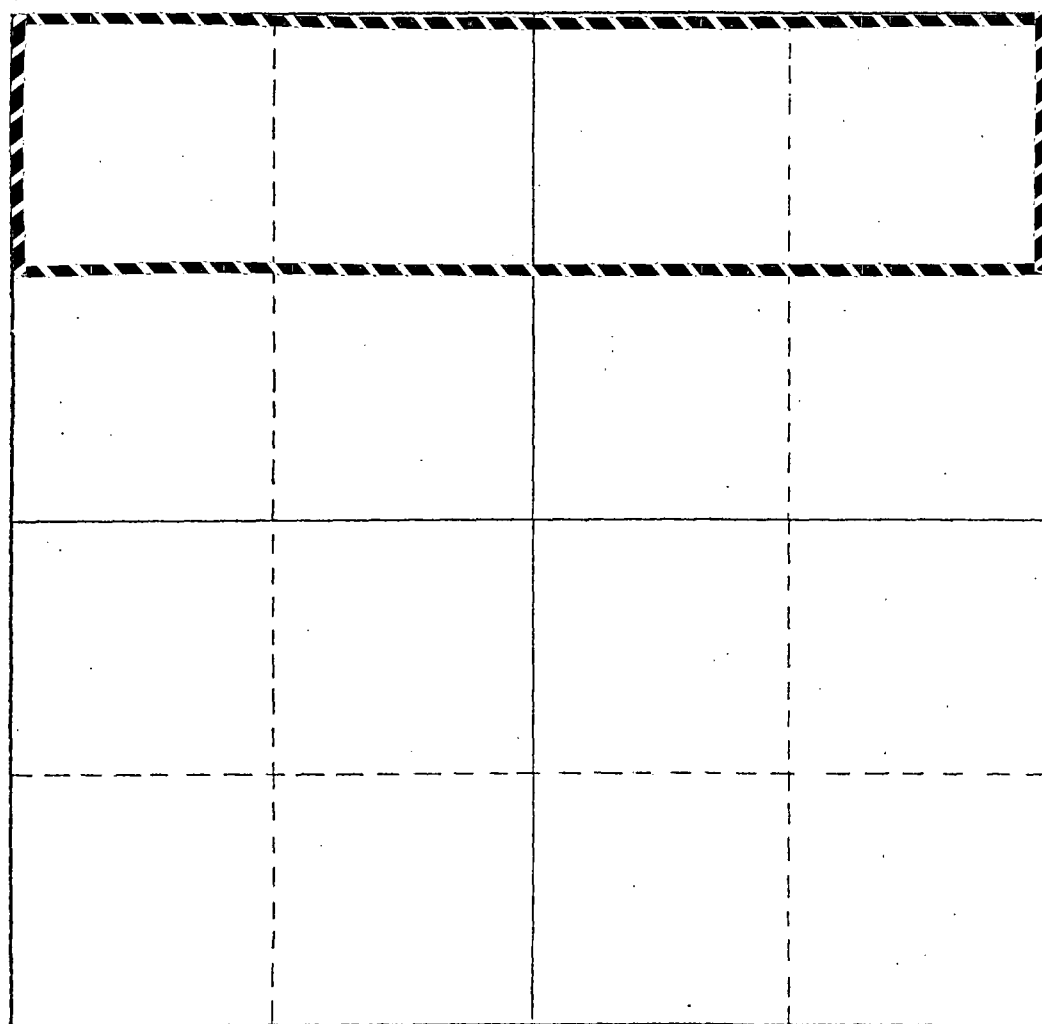
Operator Chevron U.S.A. Inc.		Lease R. H. Wamel		Well No. 179
Unit Letter N	Section 14	Township 26 S	Range 20 W	County Hidalgo
Actual Footage Location of Well: 500 feet from the N line and 1900 feet from the W line				
Ground Level Elev. 4274	Producing Formation		Pool	Dedicated Acreage: Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name *J. S. Turner*

Position
Attorney-In-Fact

Company:
Chevron U.S.A. Inc.

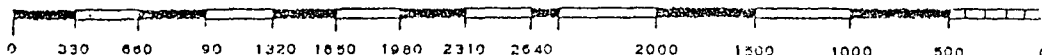
Date
Oct. 18, 1979

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer
and/or Land Surveyor

Certificate No.



CHEVRON RESOURCES COMPANY

PLAN OF OPERATION

SHALLOW TEMPERATURE GRADIENT HOLES

EXHIBIT "A"

1. Description of the Operation

The Shallow Temperature Observation Hole Program, as conducted by the Chevron Resources Company, requires the drilling of 1000 foot holes with a diameter of 4-3/4 to 5-3/8 inches. The number of holes will vary with the size of the area to be evaluated. These holes will be drilled by a state licensed drilling contractor using a truck mounted drill rig. The mud-out temperature will be monitored continually during the actual drilling.

Once each hole is completed a 1 inch (I.D.) black steel pipe, sealed at the bottom, will be placed in the hole with the top being 8-12 inches from the ground surface. The pipe is then filled with water and capped. The hole is then back-filled with cuttings and/or drilling mud to within 10 feet of the surface. The remaining void is then filled with cement.

As necessary, the pipe is unearthed and a temperature probe is lowered to total depth. Once the series of temperature logs is completed, the pipe is then filled with cement and buried. The ground surface is then smoothed and returned to as nearly as practical to pre-drilling condition.

The drilling operations will be suspended if the mud-out temperature reaches 125°F and cannot be lowered or stabilized with the addition of well-head or cooling devices. The hole will then be completed as a temperature gradient hole or abandoned.

The drilling operations will also be suspended if flowing hot water or steam at 150°F or more is encountered. The hole will then be completed as a temperature gradient hole by placing 1 inch (I.D.), black, steel pipe to total depth and cementing from total depth to surface. If the hole is to be abandoned it will be plugged with cement from total depth to surface.

If cold artesian flow is encountered the hole will be completed or abandoned as described in the paragraph above.

The equipment for drilling, as well as the drill rig, consists of a water truck and a light pickup truck. The temperature probe consists of a thermometer or thermister device on the end of a wire line and a small tripod-mounted wheel for lowering the probe down the hole.

2. The following plan of operations as required by Section 270.34 of the Federal Regulations for Geothermal Operations on public acquired and

withdrawn lands, covering paragraphs (a) through (h), is submitted pursuant to Section 270.78:

- (a) The hole locations, lease numbers (Exhibit "B") and outline of a typical drill site layout (Exhibit "C") are attached.
- (b) No new roads will be constructed for this operation. Access to area of operations will be along existing roads.
- (c) No water sources on federally administered lands will be developed and no road building material will be used.
- (d) Campsites, airstrips or other supporting facilities will not be required.
- (e) Minimal access scars, limited mainly to tire impressions, may occur during the course of drilling the hole. All such disturbances will be restored as nearly as possible to pre-drilling condition. All materials will be removed from the area once the hole is completed.
- (f) Topographic features of the drill site areas and drainage can be observed from the attached map (Exhibit "B").
- (g) If drilling mud or foam are used they will be contained by portable steel containers. When the hole is completed, the mud residue will be dried and spread on the ground surface.
- (h) The Chevron Resources Company will use all reasonable precautions to prevent waste of geothermal resources and other natural resources found in the area. At all times during operations the following precautions will be taken:

Traffic will be light and only when necessary. Light pickups will be used whenever possible. To the extent possible, only existing roads, fence lines or jeep trails will be used.

Site preparation will be limited to driving the truck-mounted drill rig to the site and setting it up for drilling.

Since the topography is not severe, the construction of drill pads will not be required.

All vehicles will be equipped with spark arresters and will carry the required fire-fighting equipment and all adequate fire protection measures will be taken to prevent any damage from fire.

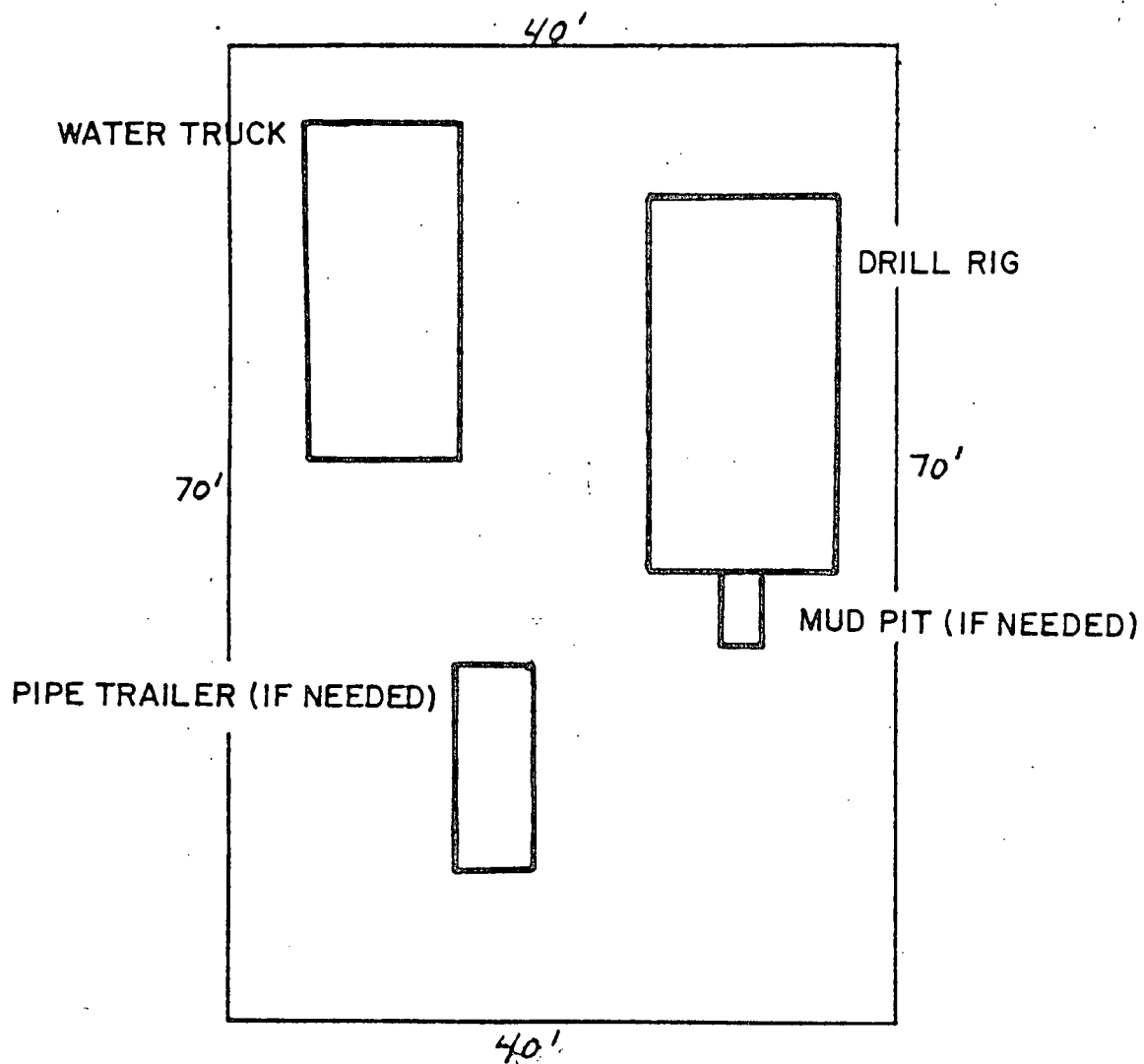
No water or other material will be pumped onto the surface of the ground which might result in soil erosion. Appropriate care will be taken so that natural drainage will not be affected and so that no pollution can occur to surface or ground water.

Geothermal operations will have no material impact on fish and the

disturbance of wildlife and vegetation in the area will be minor due to the short duration of operations and the limited number of personnel comprising the field crews. No significant damage or destruction of vegetation will occur and unavoidable dislocation of wildlife will be short term only.

Mufflers and other available devices will be used on all vehicles to control noise pollution. Minor air pollution will occur from vehicle exhaust, but all feasible measures will be used to control this pollution, in compliance with applicable laws, rules and regulations. Minor air pollution will occur from dust caused by vehicle traffic on dirt roads. Since this pollution is dependent upon natural road conditions and is temporary it therefore has no significant affect on the areas environment.

There will be very little hazard to public health and safety due to the lack of population in the area. All such hazard is confined to the crew or the rig. All appropriate safety measures and equipment will be utilized.



SCHEMATIC OF SHALLOW TEMPERATURE HOLE DRILL SITE

EXHIBIT "C."