

**GTLT - \_\_\_\_\_7\_\_\_\_\_**

**(4-16)-21S-1W  
Chevron U.S.A. Inc.  
(Dona Ana County)**

**786-N(PA); 8-77-K(PA); 2-77-  
K(PA) & GTR-79 5-77-A(PA)**

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Operator	<input checked="" type="checkbox"/>
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NEW MEXICO OIL CONSERVATION COMMISSION SEP 05 1981  
P. O. Box 2038, Santa Fe, NM 87501

SUNDRY NOTICES AND REPORTS ON  
GEOHERMAL RESOURCES OIL CONSERVATION DIVISION  
SANTA FE FORM G-103

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 - Geothermal Temperature Observation	7. Unit Agreement Name
2. Name of Operator Chevron U.S.A. Inc./Chevron Resources Company	8. Farm or Lease Name McKibbin
3. Address of Operator P.O. Box 3722, San Francisco, CA 94119	9. Well No. 786
4. Location of Well UNIT LETTER N 1900' FEET FROM THE W LINE AND 300' FEET FROM THE S LINE, SECTION 4 TOWNSHIP 21S RANGE 1W N.M.P.M.	10. Field and Pool, or Wildcat Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 3968'	12. County Dona Ana

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"/>	PLUG AND ABANDON <input checked="" type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input type="checkbox"/>	

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 203.

Temperature observation hole was completed and abandoned July 22, 1978.

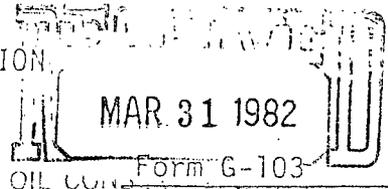
18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Mark Schoe 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



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SUNDRY NOTICES AND REPORTS  
 ON  
 GEOTHERMAL RESOURCES WELLS

4a. Indicate Type of Lease  
 SAITIA  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 L-1 (FORM G-101) FOR SUCH PROPOSALS.)

OIL WELL  GAS WELL  OTHER- Geothermal Temperature Observation

Name of Operator  
 Chevron U.S.A. Inc./Chevron Resources Company

Address of Operator  
 P.O. Box 3722, San Francisco, CA 94119

Location of Well  
 UNIT LETTER N 1900' FEET FROM THE W LINE AND 300' FEET FROM

THE S LINE, SECTION 4 TOWNSHIP 21S RANGE 1W N.M.P.M.

15. Elevation (Show whether DF, RT, GR, etc.)  
 3968'

7. Unit Agreement Name

8. Form or Lease Name  
 McKibbin

9. Well No.  
 786

10. Field and Pool, or Wildcat  
 Wildcat

12. County  
 Dona Ana

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

INFORM REMEDIAL WORK   
 TEMPORARILY ABANDON   
 CULL OR ALTER CASING   
 OTHER

PLUG AND ABANDON   
 CHANGE PLANS

REMEDIATION WORK   
 COMMENCE DRILLING OPNS.   
 CASING TEST AND CEMENT JOB   
 OTHER

ALTERING CASING  
 PLUG AND ABANDONMENT

1. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 400M 2-3.

Temperature observation hole was completed and abandoned July 22, 1978.

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

SIGNED \_\_\_\_\_ TITLE Permit Representative DATE 8/28/81

APPROVED BY Mark Kelso TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



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 OIL CONSERVATION DIVISION  
 SANTA FE  
 Form G-103

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Operator	1	
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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- Geothermal Temperature Observation	7. Unit Agreement Name
2. Name of Operator Chevron U.S.A. Inc./Chevron Resources Company	8. Farm or Lease Name McKibbin
3. Address of Operator P.O. Box 3722, San Francisco, CA 94119	9. Well No. 786
4. Location of Well UNIT LETTER <u>N</u> <u>1900'</u> FEET FROM THE <u>W</u> LINE AND <u>300'</u> FEET FROM THE <u>S</u> LINE, SECTION <u>4</u> TOWNSHIP <u>21S</u> RANGE <u>1W</u> NMPM.	10. Field and Pool, or Wildcat Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 3968'	12. County Dona Ana

16. 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"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
OTHER <input type="checkbox"/>	OTHER <input type="checkbox"/>
PLUG AND ABANDON <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
CHANGE PLANS <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>

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 ~~4004~~ 203.

Temperature observation hole was completed and abandoned July 22, 1978.

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

SIGNED Mark Schoe TITLE Permit Representative DATE 8/28/81

APPROVED BY Carl Ullvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9-5-81

CONDITIONS OF APPROVAL, IF ANY:

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



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 \_\_\_\_\_  
Lease Name McKibbin Well No. 786 Unit Letter N  
Location: 1900' feet from the W line and  
200' feet from the S line Section 4  
Township 21S Range 1W County Dona Ana

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
0	15'				Qt. Alluvium Weathered Rhyolite
15	495				

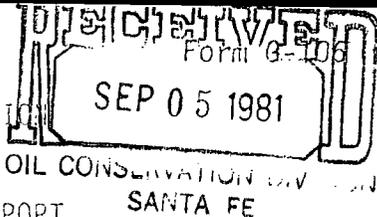
Attach Additional Sheets if Necessary

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 Schor 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 McKibbin Well No. 786  
 Unit Letter N Sec. 4 Twp. 21S Rge 1W  
 Reservoir \_\_\_\_\_ County Dona Ana

Commenced drilling 5/26/78 GEOLOGICAL MARKERS DEPTH  
 Completed drilling 5/30/78  
 Total depth 495 Plugged depth \_\_\_\_\_  
 Junk \_\_\_\_\_  
 Commenced producing \_\_\_\_\_ Geologic age at total depth: \_\_\_\_\_  
 (Date)

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.	

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 if 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 \_\_\_\_\_ Temperature log depths 495'

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 Kehoe Position Permit Rep. Date 8/28/81

## LITHOLOGIC WELL LOG

**RECEIVED**

PROSPECT RADIUM SPRINGS SEP 05 1981  
 COUNTY DONA ANA OIL COUNTY STATE NEW MEXICO  
 DATE \_\_\_\_\_ SECTION 10 TOWNSHIP \_\_\_\_\_ RANGE \_\_\_\_\_  
 WELL No. RSCH-6A-78

CHEVRON RESOURCES COMPANY

TIME	DEPTH	LITHOLOGY	COMMENTS
	0-15	Many different rock types-quartzite, green metamorphics, silicic fine grained laneous rks., rhyolite, possibly andesite, brown flint.	Alluvium
	15-30	Strongly weathered highly silicic ig. rk. (fine grained granite sand), rhyolite, traces of green, yellow & red rk., (1/8x1/8x1/8)-angular to semi-angular.	
	30-45	Same as 15-30	
	45-60	Same as 15-45 (Note: It appears as if the lighter colored silicic rock is a weathering product of the darker, pink rhyolite. The grain size & amount of dk. minerals is identical).	
	60-75	Same as 15-60.	
	75-90	Same as 15-75 except with a large (1 x1 x1/4) angular fragment of appears to be andesite with 1/16"-1/8" phenocrysts of white plagioclase.	
	90-105	Same as 15-75.	
	105-120	Same as 15-75.	
	120-135	Same as above.	
	135-150	Same as above.	
	150-165	Same as above.	
	165-180	Same as above.	
	180-195	Same as above.	
	195-210	Same as above, but with a small (1/2 x1/8x1/2) chunk of andesite.	
	210-225	Same as above, without much andesite.	
	225-240	Same as above.	
	240-255	Same as above.	
	255-270	Same as above.	
	270-285	Same as above, but seems to be more weathered and rotten.	
	285-300	Same as above.	
	300-315	Same as above.	

LITHOLOGIC WELL LOG

RECEIVED  
SEP 05 1981

PROSPECT RADIUM SPRINGS  
 COUNTY DONA ANA OIL CONSERVATION STATE OF NEW MEXICO  
 DATE \_\_\_\_\_ SECTION SANTA FE  
 TOWNSHIP \_\_\_\_\_  
 RANGE \_\_\_\_\_  
 WELL No. RSCH-6A-78

CHEVRON RESOURCES COMPANY

TIME	DEPTH	LITHOLOGY	COMMENTS
	315-330	Same as above, but with a piece of jasper (3/4x1/4x1/8).	
	330-345		
	345-360	Same as above.	
	360-375	Same as above.	
	375-390	Same as above.	
	390-405	Same as above.	
	405-420	Same as above.	
	420-435	Same as above.	
	435-450	Same as above.	
	450-465	Same as above.	
	465-480	Same as above.	
	480-495	Same as above.	

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

MAY - 4 1978

CONSERVATION FORM 6-101

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Operator	/	
and Office		

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

5A. Indicate Type of Lease  
STATE  FCC

5. State Lease No.

Type of Work Drill [] Deepen [ ] Plug Back [ ]  
Type of Well Geothermal Producer [ ] Temp Observation []  
Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name

8. Farm or Lease Name  
**McKIBBIN**

Name of Operator  
**CHEVRON U.S.A., INC.**

9. Well No.  
**786**

Address of Operator  
**P.O. BOX 3722 SAN FRANCISCO, CA 94119**

10. Field and Pool, or Wildcat  
**WILDCAT**

Location of Well UNIT LETTER **N** LOCATED **1900'** FEET FROM THE **W** LINE  
**300** FEET FROM THE **S** LINE OF SEC. **4** TWP. **21S** RGE. **1W** NMPM

12. County  
**DONA ANA**

Elevations: (Show whether DF, RT, etc.) <b>3968'</b>	21A. Kind & Status Plug. Bond	19. Proposed Depth <b>500'</b>	19A. Formation	20. Rotary or C.T. <b>ROTARY</b>
		21B. Drilling Contractor <b>JOHNSON DRILLING</b>	22. Approx. Date Work will start <b>5/15/78</b>	

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP

PER EXHIBIT "A"

APPROVAL VALID FOR 90 DAYS  
PERMIT EXPIRES 8/3/78  
UNLESS DRILLING UNDERWAY

OIL CONSERVATION COMMISSION TO BE NOTIFIED  
WITHIN 24 HOURS OF BEGINNING OPERATIONS

ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRO-  
DUCE 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.

Signed J. H. Turner Title ATTORNEY-IN-FACT Date 5/1/78

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 5/5/78

CONDITIONS OF APPROVAL, IF ANY:

GEOHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. MAY - 1 1978

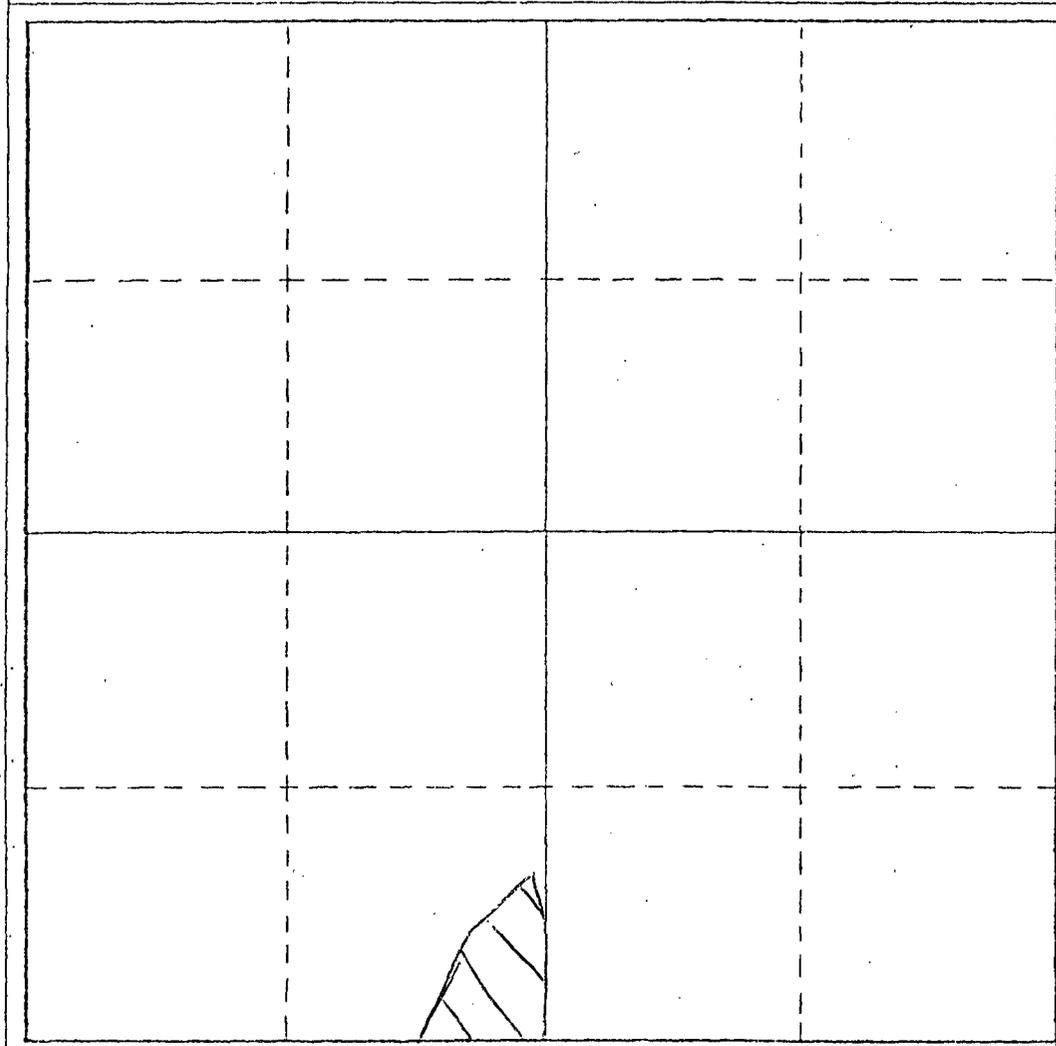
Operator <b>CHEVRON U.S.A. INC.</b>		Lease <b>McKIBBIN</b>		Well No. <b>786</b>
Unit Letter <b>N</b>	Section <b>4</b>	Township <b>21S</b>	Range <b>1W</b>	County <b>CONSERVATION COUNTY</b>
Actual Footage Location of Well:				
<b>1900</b>	feet from the <b>W</b>	line and	<b>300</b>	feet from the <b>S</b>
Ground Level Elev. <b>3968</b>	Producing Formation	Pool	Dedicated Acreage: <b>14</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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: *[Signature]*  
 Position: **ATTORNEY-IN-FACT**  
 Company: **CHEVRON U.S.A. INC.**  
 Date: **5/1/78**

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 250-500 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.

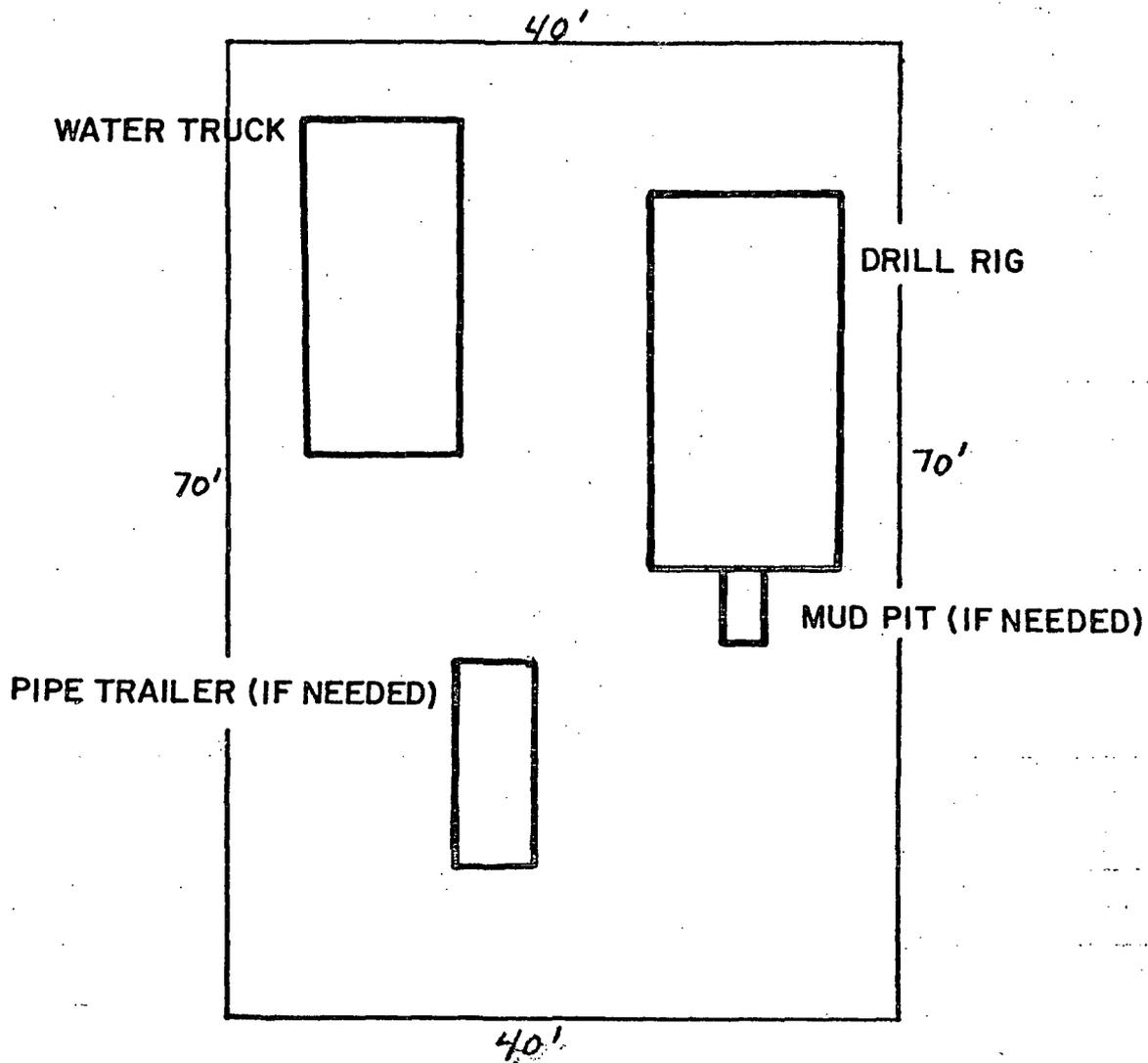
No water or other material will be pumped onto the surface of the ground which might result in soil erosion. Appropriate care will be taken so that natural drainage will not be affected and so that no pollution can occur to surface or ground water.

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"

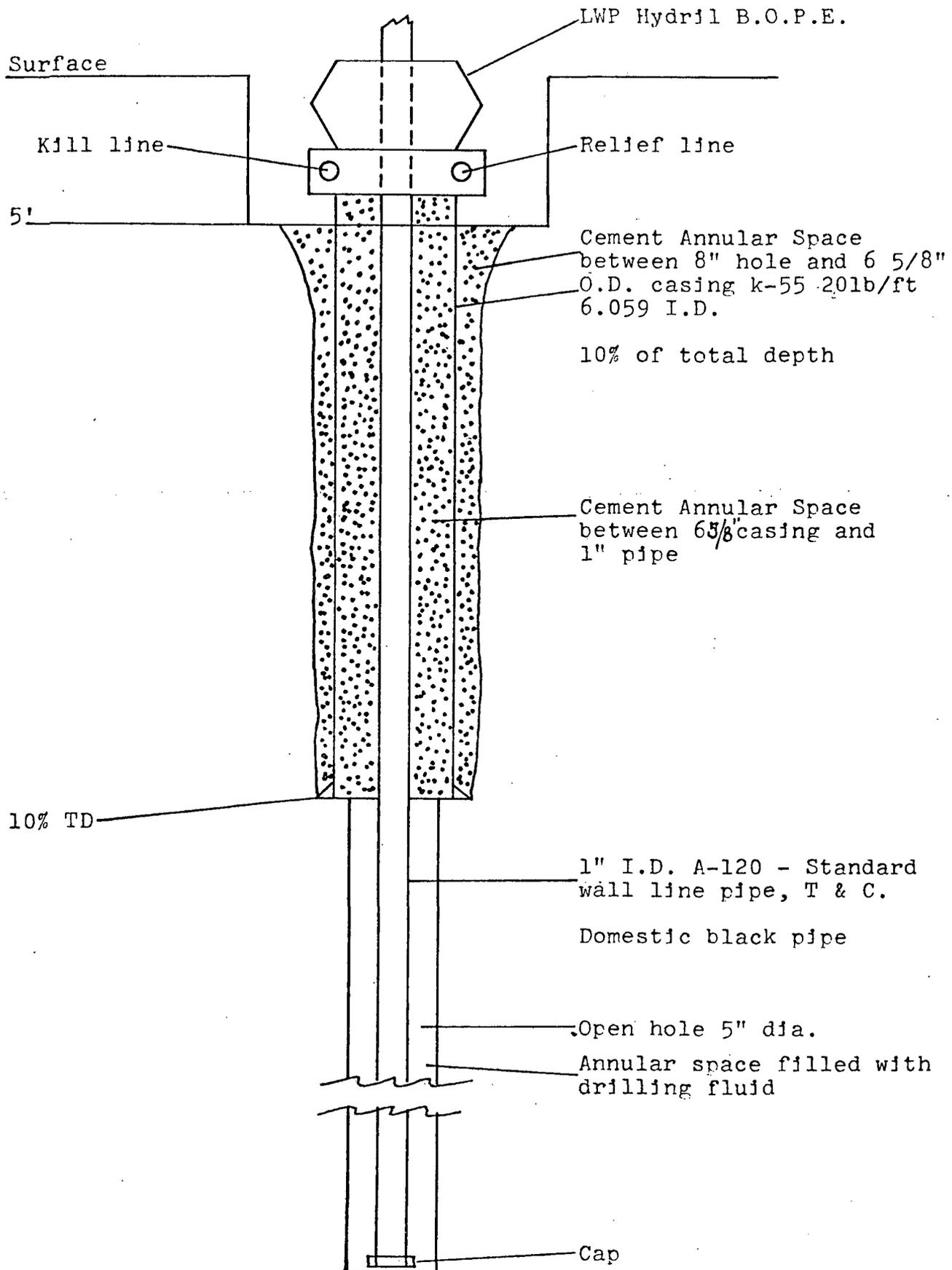
ADDITION TO PLAN OF OPERATION (EXHIBIT "A")  
SHALLOW TEMPERATURE GRADIENT HOLES  
DEEPER THAN 500 FEET

The normal drilling procedures (Exhibit "A") will be changed to adhere to U.S.G.S. requirements when drilling shallow temperature gradient holes deeper than 500 feet. The logistical and environmental factors will remain the same since the drilling equipment is identical. The changes for the holes deeper than 500 feet are as follows:

1. An 8 3/4 inch hole will be drilled to 10 % of proposed total depth and 6 5/8 inch (O.D.) welded, steel casing will be lowered into the hole and cemented into place. The cement will be allowed to set for a minimum of 24 hours.
2. A small cellar will then be dug to allow for the blow-out preventer and flange to be attached to the surface casing beneath the truck-mounted drill rig.
3. A bag or ram type blow-out prevention unit will be bolted into place. The blow-out equipment will conform to U.S.G.S. requirements.
4. The remaining hole to proposed total depth will be completed as a temperature gradient hole as described in Exhibit "A".
5. Drilling operations will be suspended immediately if:
  - a. Mud-out temperature reaches 175°F and cannot be lowered or stabilized by the addition of cooling devices or materials.
  - b. Flowing steam or hot water at or greater than 175°F is encountered.
6. If the temperature limit as described in item "5a" is reached, the hole will be completed as a temperature gradient hole or abandoned as described in Exhibit "A".
7. If the temperature limit as described in "5b" is reached, the hole will be completed as a temperature gradient hole by inserting 1 inch (I.D.) black steel pipe and filling the hole with drilling mud and laying a 100 foot plug both above and below the casing shoe. Then a ten foot cement surface plug will be added. If the hole is to be abandoned the 1 inch black steel pipe will not be placed in the hole.
8. Should cold artesian flow be encountered, the hole will be completed as a temperature gradient hole or abandoned as in item "6".

9. A 10'x10' sump will be dug on the drill site to provide adequate water for cooling and well control. Upon completion of the drilling operations, it will be filled in and the ground surface restored as near as practical to its original condition.

Schematic Diagram Temperature Gradient Well and B.O.P.E.



TD

EXHIBIT "D"

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

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SUNDRY NOTICES AND REPORTS  
ON  
GEOHERMAL RESOURCES WELLS

Indicate Type of Lease  
State  Fee   
5.a 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. 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"/>	7. Unit Agreement Name
2. Name of Operator CHEVRON U.S.A. INC.	8. Farm or Lease Name MCKIBBIN
3. Address of Operator P.O. BOX 3722, SAN FRANCISCO, CA. 94119	9. Well No. 786
4. Location of Well Unit Letter <u>N</u> <u>1900</u> Feet From The <u>W</u> Line and <u>300</u> Feet From The <u>S</u> Line, Section <u>4</u> Township <u>21S</u> Range <u>1W</u> NMPM.	10. Field and Pool, or Wildcat WILDCAT
15. Elevation (Show whether DF, RT, GR, etc.) 3968'	12. County DONA ANA

16. 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"/>	PLUG AND ABANDON <input checked="" type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG & ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER _____ <input type="checkbox"/>		OTHER _____	

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 203.

PER EXHIBIT "A"

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

SIGNED J. Turner TITLE ATTORNEY-IN-FACT DATE 5/1/78

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

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

MAY - 4 1978

**SUNDRY NOTICES AND REPORTS ON CONSERVATION OF GEOTHERMAL RESOURCES WELLS**

5. Indicate Type of Lease  
State  Fee   
5.a 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. 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"/>	7. Unit Agreement Name
2. Name of Operator <b>CHEVRON U.S.A. INC.</b>	8. Farm or Lease Name <b>MCKIBBIN</b>
3. Address of Operator <b>P.O. BOX 3722, SAN FRANCISCO, CA. 94119</b>	9. Well No. <b>786</b>
4. Location of Well Unit Letter <b>N</b> <b>1900</b> Feet From The <b>W</b> Line and <b>300</b> Feet From The <b>S</b> Line, Section <b>4</b> Township <b>21S</b> Range <b>1W</b> NMPM.	10. Field and Pool, or Wildcat <b>WILDCAT</b>
15. Elevation (Show whether DF, RT, GR, etc.) <b>3968'</b>	12. County <b>DONA ANA</b>

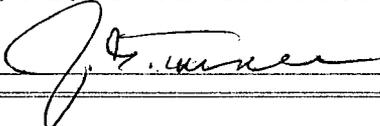
16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input checked="" type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> OTHER <input type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG & ABANDONMENT <input type="checkbox"/> CASING TEST AND CEMENT JOB <input type="checkbox"/> OTHER _____
---	--

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 203.

PER EXHIBIT "A"

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

SIGNED  TITLE ATTORNEY-IN-FACT DATE 5/1/78

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

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P. O. Box 2088, Santa Fe 87501

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U. S. G. S.		
Operator	1	
Land Office		

SUNDRY NOTICES AND REPORTS  
ON  
GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease  
State CA Fee   
Santa Fe 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. 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"/>	7. Unit Agreement Name
2. Name of Operator Chevron U.S.A. Inc.	8. Farm or Lease Name Colquitt Co.
3. Address of Operator P.O. Box 3722 San Francisco, CA 94119	9. Well No. 8-77
4. Location of Well Unit Letter <u>K</u> <u>1750</u> Feet From The <u>W</u> Line and <u>1350</u> Feet From The <u>S</u> Line, Section <u>11</u> Township <u>21S</u> Range <u>1W</u> NMPM.	10. Field and Pool, or Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 3900'	12. County Dona Ana

16. 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"/>	PLUG AND ABANDON <input checked="" type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG & ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER <input type="checkbox"/>		OTHER _____	

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 203.

Abandoned in following manner:

1. Temperature pipe cut-off 18" below the ground surface.
2. Hole was filled with cuttings and/or drilling mud to within 10 feet of the surface.
3. Remaining void and temperature pipe were filled with cement
4. Cement was covered with dirt and ground surface smoothed.

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

SIGNED J. R. Turner TITLE Attorney in fact DATE 11-8-77

APPROVED BY Carl Uloog TITLE SENIOR PETROLEUM GEOLOGIST DATE 12-5-77

CONDITIONS OF APPROVAL, IF ANY:

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Operator	1
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BLM	1

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

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

Form G-101

5A. Indicate Type of Lease  
STATE  FCC

5. State Lease No.  
-

7. Unit Agreement Name

8. Farm or Lease Name  
Colquitt Co.

9. Well No.  
8-77

10. Field and Pool, or Wildcat

1. Type of Work  
Drill  Deepen  Plug Back

2. Type of Well  
Geothermal Producer  Temp Observation   
Low-Temp Thermal  Injection/Disposal

3. Name of Operator  
Chevron U.S.A. Inc.

4. Address of Operator

6. Location of Well  
UNIT LETTER K LOCATED 1750 FEET FROM THE W LINE  
AND 1350' FEET FROM THE S LINE OF SEC. 11 TWP. 21S RGE. 1W NMPM

12. County  
Dona Ana

19. Proposed Depth  
500'

19A. Formation  
-

20. Rotary or C.T.  
Rotary

21. Elevations (Show whether DF, RT, etc.)  
3900'

21A. Kind & Status Plug. Bond  
-

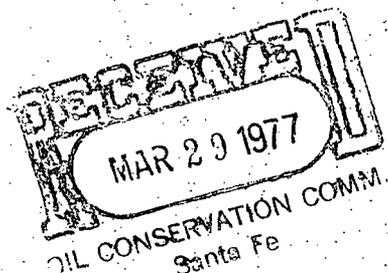
21B. Drilling Contractor  
To be named later

22. Approx. Date Work will start  
5/1/77

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP

See attached proposed plan of exploration



APPROVAL VALID  
FOR 90-DAYS UNLESS  
DRILLING COMMENCED

EXPIRES 7/3/77

IN 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.

Signed By: Chevron U.S.A. Inc. Title Asst. Secretary Date 3/22/77

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 4/4/77

CONDITIONS OF APPROVAL, IF ANY:

CHEVRON RESOURCES COMPANY  
PLAN OF OPERATION  
SHALLOW TEMPERATURE OPERATION HOLES

1. Description of the Operation

The Shallow Temperature Observation Hole Program, as conducted by the Chevron Resources Company, requires the drilling of 250-500 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.

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 are 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 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 "A") and outline of a typical drill site layout (Exhibit "B") are attached.
- (b) No new roads will be constructed for this operation. Access to sites 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 "A").
- (g) If drilling mud is used, it will be contained by an 8' x 3' x 3-1/2' steel mud pit. 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.

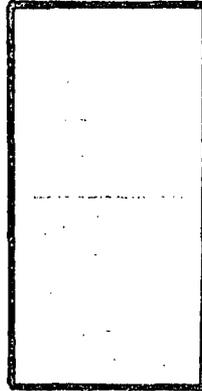
Mufflers and other available devices will be used on all vehicles to control noise pollution. Minor air pollution will occur from vehicle exhaust, but all feasible measures will be used to control this pollution, in compliance with applicable laws, rules and regulations. Minor air pollution will occur 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.

WATER TRUCK



DRILL RIG



MUD PIT (IF NEEDED)



PIPE TRAILER (IF NEEDED)

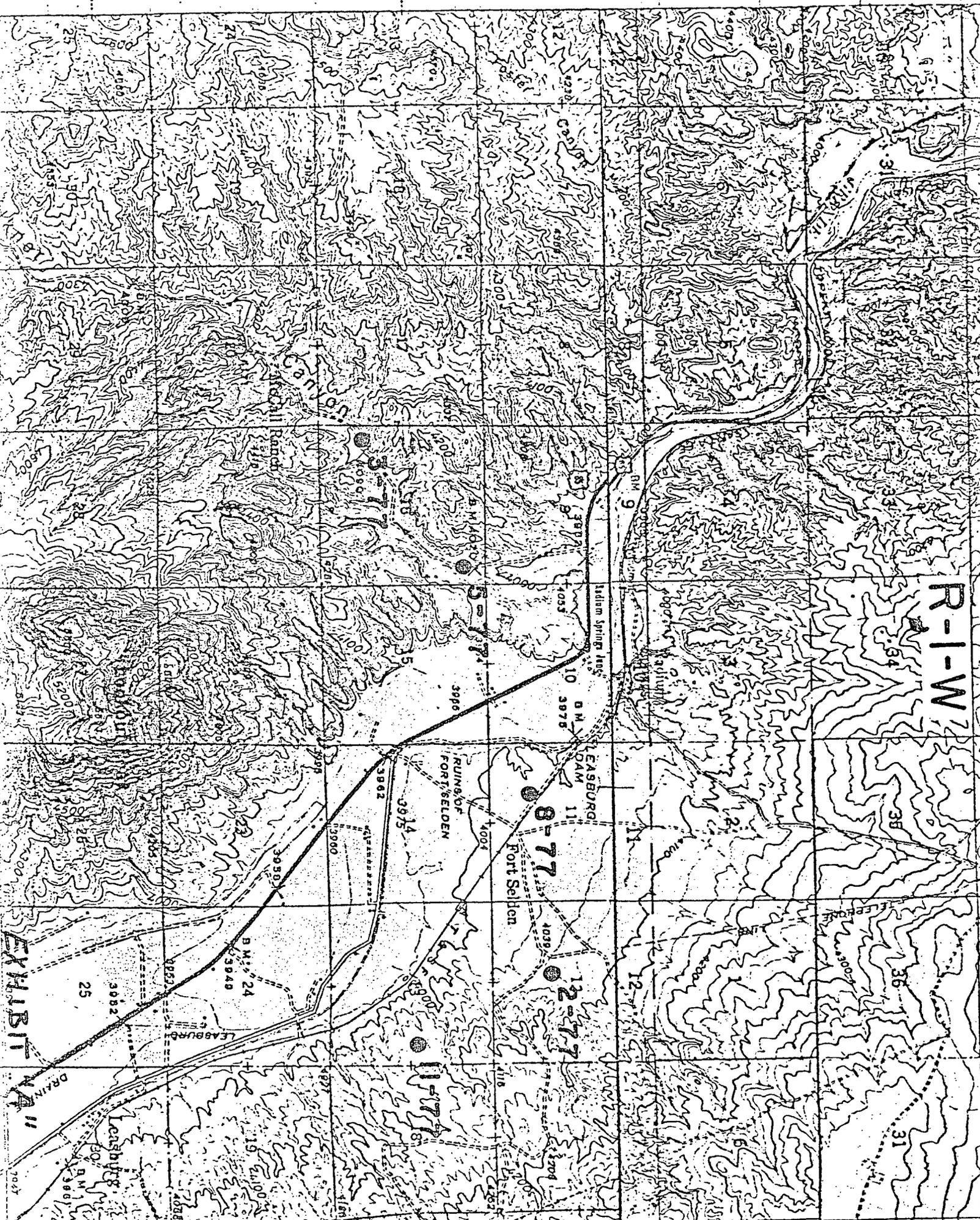


SCHEMATIC OF SHALLOW TEMPERATURE HOLE DRILL SITE

EXHIBIT "B"

T 21 S

R-1-W



EXHIBIT

AA 11

DRAIN

CHEVRON RESOURCES COMPANY  
PLAN OF OPERATION  
SHALLOW TEMPERATURE OPERATION HOLES

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CHEVRON RESOURCES COMPANY  
PLAN OF OPERATION  
SHALLOW TEMPERATURE OPERATION HOLES

1. Description of the Operation

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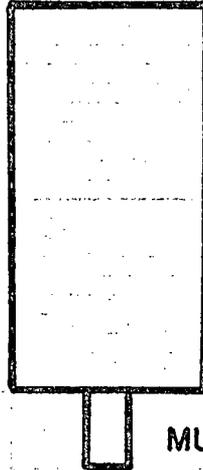
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There will be very little hazard to public health and safety due to the lack of population in the area. All such hazard is confined to the crew or the rig. All appropriate safety measures and equipment will be utilized.

WATER TRUCK



DRILL RIG



MUD PIT (IF NEEDED)

PIPE TRAILER (IF NEEDED)



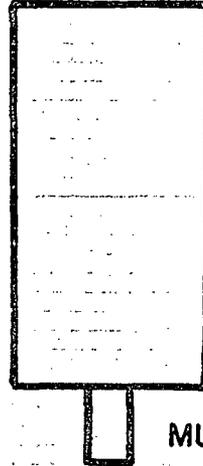
SCHEMATIC OF SHALLOW TEMPERATURE HOLE DRILL SITE

EXHIBIT "B"

WATER TRUCK



DRILL RIG



MUD PIT (IF NEEDED)

PIPE TRAILER (IF NEEDED)



SCHEMATIC OF SHALLOW TEMPERATURE HOLE DRILL SITE

EXHIBIT "B"



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

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SUNDRY NOTICES AND REPORTS  
ON  
GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease  
State  Fee

5.a 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. 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"/>	7. Unit Agreement Name
2. Name of Operator Chevron U.S.A. Inc.	8. Farm or Lease Name Colquitt Co.
3. Address of Operator P.O. Box 3722 San Francisco, CA 94119	9. Well No. 2-77
4. Location of Well Unit Letter <u>K</u> <u>2450</u> Feet From The <u>W</u> Line and <u>1350</u> Feet From The <u>S</u> Line, Section <u>12</u> Township <u>21 S</u> Range <u>1W</u> NMPM.	10. Field and Pool, or Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4040'	12. County Dona Ana

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input checked="" type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	
OTHER <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG & ABANDONMENT <input checked="" type="checkbox"/>
CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER _____	

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 203.

Abandoned in following manner:

1. Temperature pipe cut-off 18" below ground surface.
2. Hole was filled to within 10 feet of surface with cuttings and/or drilling mud.
3. Remaining void and temperature pipe were filled with cement.
4. Cement was covered with dirt and the ground surface smoothed.

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

SIGNED J. Turner TITLE Attorney in fact DATE 11-8-77

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 12-5-77

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

Form G-101

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File	1 ✓
M.B.M.	1
U.S.G.S.	1
Operator	1
Land Office	
BLM	1

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

5A. Indicate Type of Lease  
STATE  FCC

5. State Lease No.

4. Type of Work  
Drill  Deepen  Plug Back

7. Unit Agreement Name

6. Type of Well  
Geothermal Producer  Temp Observation   
Low-Temp Thermal  Injection/Disposal

8. Farm or Lease Name

Colquitt Co.

Name of Operator  
Chevron U.S.A. Inc.

9. Well No.

2-77

Address of Operator  
P. O. Box 3722 San Francisco CA 94119

10. Field and Pool, or Wildcat

Location of Well  
UNIT LETTER K LOCATED 2450 FEET FROM THE W LINE

1350 FEET FROM THE S LINE OF SEC. 12 TWP. 21S RCF. 1W NMPM

12. County

Dona Ana

19. Proposed Depth  
500'

19A. Formation

20. Rotary or C.T.  
Rotary

21. Elevation (Show whether DF, RT, etc.)  
4040'

21A. Kind & Status Plug. Bond

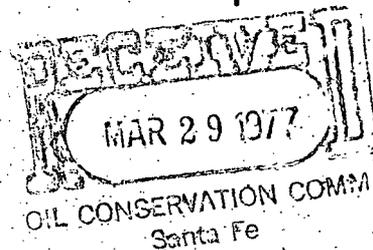
21B. Drilling Contractor  
to be named later

22. Approx. Date Work will start  
5/1/77

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP

see attached proposed plan of exploration



APPROVAL VALID  
FOR 90 DAYS UNLESS  
DRILLING COMMENCED  
EXPIRES 7/3/77

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODU  
TIVE 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.

Signed [Signature] By Chevron U.S.A. Inc.

Title Asst. Secretary

Date 3/22/77

(This space for State Use)

APPROVED BY Carl Ulvog

TITLE SENIOR PETROLEUM GEOLOGIST

DATE 4/4/77

CONDITIONS OF APPROVAL, IF ANY:

CHEVRON RESOURCES COMPANY  
PLAN OF OPERATION  
SHALLOW TEMPERATURE OPERATION HOLES

1. Description of the Operation

The Shallow Temperature Observation Hole Program, as conducted by the Chevron Resources Company, requires the drilling of 250-500 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.

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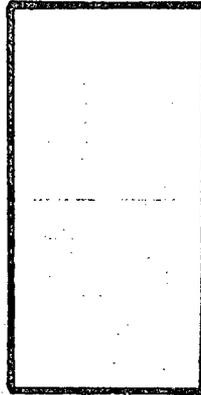
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WATER TRUCK



DRILL RIG



MUD PIT (IF NEEDED)



PIPE TRAILER (IF NEEDED)



SCHEMATIC OF SHALLOW TEMPERATURE HOLE DRILL SITE

EXHIBIT "B"



R-1-W

LEASBURG DAM  
10 3976

8-77  
4037  
PORT SELDEN

12-77  
4037

11-77  
4037

B.M. 24  
3948

25

38

36

31

MADISON SPRING

RUMBLE OF  
PORT SELDEN

LEASBURG

LEASBURG

LEASBURG

LEASBURG

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SHALLOW TEMPERATURE OPERATION HOLES

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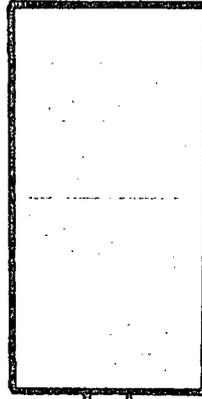
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WATER TRUCK



DRILL RIG



MUD PIT (IF NEEDED)



PIPE TRAILER (IF NEEDED)



SCHEMATIC OF SHALLOW TEMPERATURE HOLE DRILL SITE

EXHIBIT "B"

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PLAN OF OPERATION  
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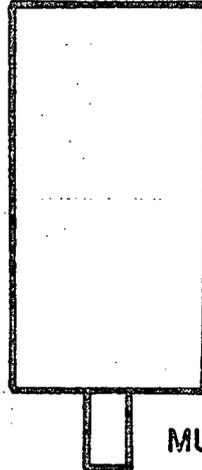
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MUD PIT (IF NEEDED)

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SCHEMATIC OF SHALLOW TEMPERATURE HOLE DRILL SITE

EXHIBIT "B"

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

NO. OF COPIES RECEIVED	2
DISTRIBUTION	
File	1 ✓
N. M. B. M.	
U. S. G. S.	
Operator	1
Land Office	

SUNDRY NOTICES AND REPORTS NOV 14 1977  
ON  
GEOTHERMAL RESOURCES WELLS CONSERVATION (COMMI.)  
Santa Fe

5. Indicate Type of Lease  
State  Fee   
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. 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"/>	7. Unit Agreement Name
2. Name of Operator Chevron U.S.A. Inc.	8. Farm or Lease Name
3. Address of Operator P.O. Box 3722 San Francisco, CA 94119	9. Well No. 5-77
4. Location of Well Unit Letter <u>A</u> <u>600</u> Feet From The <u>E</u> Line and <u>750</u> Feet From The <u>N</u> Line, Section <u>16</u> Township <u>21S</u> Range <u>1W</u> NMPM.	10. Field and Pool, or Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 3960'	12. County Dona Ana

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK  PLUG AND ABANDON   
TEMPORARILY ABANDON  CHANGE PLANS   
PULL OR ALTER CASING   
OTHER

SUBSEQUENT REPORT OF:

REMEDIAL WORK  ALTERING CASING   
COMMENCE DRILLING OPNS.  PLUG & ABANDONMENT   
CASING TEST AND CEMENT JOB   
OTHER \_\_\_\_\_

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 203.

Abandoned in following manner:

1. Temperature pipe cut-off 18" below the ground surface
2. Hole was filled with cuttings and/or drilling mud to within 10 feet of the surface.
3. Remaining void and temperature pipe were filled with cement.
4. Cement was covered with dirt and ground surface smoothed.

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

SIGNED J. F. Turner TITLE Attorney in fact DATE 11-8-77

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 12-5-77

CONDITIONS OF APPROVAL, IF ANY:

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

Form G-101

NO. OF COPIES RECEIVED	4
DISTRIBUTION	
Title	1
M.B.M.	1
S.G.S.	1
Operator	1
and Office	1

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

5A. Indicate Type of Lease  
STATE  FCC

5. State Lease No.  
GTR-79

1. Type of Work  
Drill [X] Deepen [ ] Plug Back [ ]  
2. Type of Well  
Geothermal Producer [ ] Temp Observation [X]  
Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name  
-

8. Farm or Lease Name  
-

3. Name of Operator  
Chevron U.S.A. Inc.

9. Well No.  
5-77

4. Address of Operator  
P. O. Box 3722 San Francisco,

10. Field and Pool, or Wildcat

6. Location of Well  
UNIT LETTER A LOCATED 600' FEET FROM THE E LINE  
750 FEET FROM THE N LINE OF SEC. 16 TWP. 21S RCF. 1W NMPM

12. County  
Dona Ana

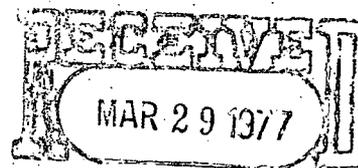
19. Proposed Depth  
500'  
19A. Formation  
-  
20. Rotary or C.T.  
Rotary

21. Elevations (Show whether DP, RT, etc.)  
3960'  
21A. Kind & Status Plug. Bond  
-  
21B. Drilling Contractor  
To be named later  
22. Approx. Date Work will start  
5/1/77

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP

see attached proposed plan of exploration



OIL CONSERVATION COMM.  
Santa Fe

APPROVAL VALID  
FOR 90 DAYS UNLESS  
DRILLING COMMENCED.  
EXPIRES 7/3/77

IN 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.

Signed C. J. Butler By Chevron U.S.A. Inc. Title Asst. Secretary Date 3/22/77

(This space for State Use)

APPROVED BY Carl Ullrog TITLE SENIOR PETROLEUM GEOLOGIST DATE 4/4/77

CONDITIONS OF APPROVAL, IF ANY:

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SCHEMATIC OF SHALLOW TEMPERATURE HOLE DRILL SITE

EXHIBIT "B"



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- (g) If drilling mud is used, it will be contained by an 8' x 3' x 3-1/2' steel mud pit. 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.

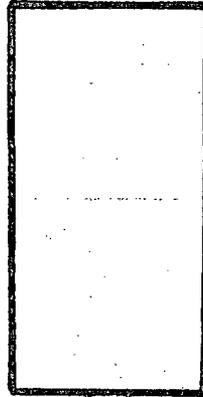




WATER TRUCK



DRILL RIG



MUD PIT (IF NEEDED)



PIPE TRAILER (IF NEEDED)



SCHEMATIC OF SHALLOW TEMPERATURE HOLE DRILL SITE

EXHIBIT "B"