

GTLT - _____11_____

**Lamar Hunt Geothermal
Operations
(27&34)-20S-1W
Dona Ana County**

**Well No. 25 (LRG-503)
& 25-34**

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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

5. Indicate Type of Lease State <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
--

5.a State Lease No. Fed. NM-25557

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 type="checkbox"/> Low-Temp Thermal <input checked="" type="checkbox"/> Injection/Disposal <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator LAMAR HUNT GEOTHERMAL OPERATIONS	8. Farm or Lease Name Radium Springs
3. Address of Operator 2800 Thanksgiving Tower, Dallas, Texas 75201	9. Well No. 53
4. Location of Well Unit Letter <u>G-</u> <u>2510.54</u> Feet From The <u>East</u> Line and <u>3521.23</u> Feet From The <u>South</u> Line, Section <u>27</u> Township <u>20 S.</u> Range <u>1 W.</u> NMPM.	10. Field and Pool, or Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4376 Ft. GR	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 type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	
OTHER <u>Perforate & Test</u> <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 <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.

Work plan is to perforate a zone from 1590-to 1600 feet, by inserting a standard perforating gun to produce two perforations per foot, in the 10-foot zone specified.

The well will be used as a monitoring well during step-flow test on Well 25-34.

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

SIGNED Roger A. Edwards TITLE LAMAR HUNT GEOTHERMAL OPERATIONS DATE 12-1-82

APPROVED BY Carl Ulvog TITLE DISTRICT SUPERVISOR DATE 12/10/82

CONDITIONS OF APPROVAL, IF ANY:

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DISTRIBUTION		
File	1	✓
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U. S. G. S.		
Operator	1	
Land Office		

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

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

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5.a State Lease No. Federal NM-25557

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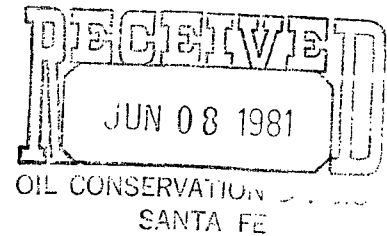
1. Type of well Geothermal Producer <input type="checkbox"/> Temp. Observation <input checked="" type="checkbox"/> Low-Temp Thermal <input type="checkbox"/> Injection/Disposal <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator Lamar Hunt	8. Farm or Lease Name Radium Springs
3. Address of Operator 2500 First National Bank Building, Dallas, Texas 75202	9. Well No. 53
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15. Elevation (Show whether DF, RT, GR, etc.) 4376 GR	12. County Dona Ana

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

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.

Well is shut in and to be used as a temperature observation well.



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

SIGNED <u>G. S. Bunnagan Jr.</u>	TITLE <u>Lamar Hunt Geothermal Operations</u>	DATE <u>June 3, 1981</u>
APPROVED BY <u>Carl Ulvog</u>	TITLE <u>SENIOR PETROLEUM GEOLOGIST</u>	DATE <u>6/26/81</u>
CONDITIONS OF APPROVAL, IF ANY:		

NEW MEXICO OIL CONSERVATION COMMISSION

P. O. Box 2088, Santa Fe 87501

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U. S. G. S.	
Operator	<input checked="" type="checkbox"/>
Land Office	

SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease

State ☒Fee ☐

5.a State Lease No.

Federal NM-25557

APR 08 1981

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. For Permit -" (Form G-101) for Such Proposals.)

1. Type of well Geothermal Producer <input type="checkbox"/> Low-Temp Thermal <input type="checkbox"/>	Temp. Observation <input checked="" type="checkbox"/> Injection/Disposal <input type="checkbox"/>	UNIT Agreement Name
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16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

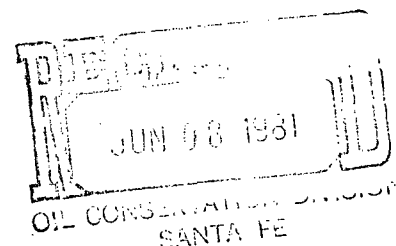
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐ CHANGE PLANS ☐OTHER Shut in - Observation Well ☒

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.

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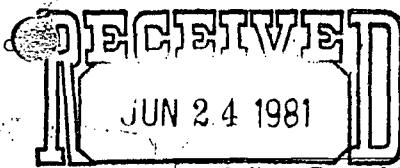


18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED G. I. Bumgarner Jr. TITLE Lamar Hunt Geothermal Operations DATE June 3, 1981APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 6/26/81

CONDITIONS OF APPROVAL, IF ANY:

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N. M. B. M.		
U. S. G. S.		
Operator		<input checked="" type="checkbox"/>
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

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5.a State Lease No. Federal NM-25557

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PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input checked="" 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 type="checkbox"/>
CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER <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.

Method of Cement Placement:

20"	100'	From inside - out
13 3/8"	1408'	Haliburton Pump Truck
9 5/8"	5553'	Haliburton Pump Truck

7" liner	Top of liner hanger	5330'
	Top of liner	5343'

Slotted intervals	7291' - 7418'
	7505' - 7633'
	7801' - 8058'

Bottom of liner	8980'
-----------------	-------

Total depth 9005'

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

SIGNED G. S. Bunnagard TITLE Lamar Hunt Geothermal Operations DATE June 22, 1981APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 6/26/81

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APR 08 1974

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ gas ☐ other ☐ Geothermal

2. NAME OF OPERATOR
Lamar Hunt

3. ADDRESS OF OPERATOR
2500 1st Nat'l Bank, Dallas, TX 75202

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
968.37 fwl, 2335.13 fsl, Sec.
AT SURFACE: 34, T.20S., R.1 W. NMPM
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF	<input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	<input type="checkbox"/>
(other) Operations suspended	<input type="checkbox"/>	<input type="checkbox"/>

5. LEASE
Federal NM-25557

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Radium Springs

9. WELL NO.
25-34

10. FIELD OR WILDCAT NAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 34, T.20S., R.1W. NMPM

12. COUNTY OR PARISH
Dona Ana

13. STATE
New Mexico

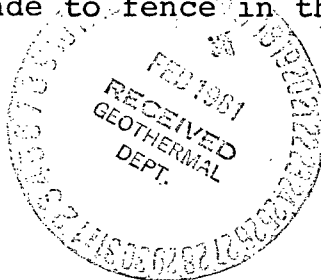
14. API NO.
0118

15. ELEVATIONS (SHOW DF, KDB, AND WD)
4240 GR

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Suspension of Operations.
well to be used for observation and/or possibly reinjection
arrangements have been made to fence in the location



Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Lamar Hunt TITLE Geothermal Operations 2/6/81

(This space for Federal or State office use)

APPROVED BY Harold R. Bue TITLE Dist. Geothermal Suprv. DATE Feb. 12, 1981
CONDITIONS OF APPROVAL, IF ANY:

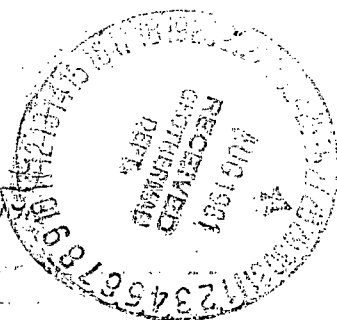
Please submit your completion report using Form 9-1960 for work to this point.



APR 08 1982

OIL CONSERVATION

SANTA FE



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

DEMING

**S. E. REYNOLDS
STATE ENGINEER**

August 26, 1981

**ADDRESS CORRESPONDENCE TO:
P. O. BOX 844
DEMING, N. M. 88030**

FILE: LRG-564-Exploratory

Hunt Energy Corporation
2500 First National Bank Building
Dallas, Texas 75202

Gentlemen:

Enclosed is your copy of the well record
for your geothermal exploration test well No.
LRG-564-Exploratory, which has been accepted
for filing.

Yours truly,

L. T. Putnam
Supervisor, District III

LTP:sfs
Encl: Well Record
cc: State Engineer

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

Owner of well LEON HUNT GEOTHERMAL OPERATIONS Owner's Well No. 53-22
 Street or Post Office Address 2500 FIRST NATIONAL BANK BUILDING
 City and State DALLAS TEXAS 75202

Well was drilled under Permit No. LR2-564 Exploratory and is located in the:

a. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 27 Township 20.2 Range 1W N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
 Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in
 the _____ Grant.

(B) Drilling Contractor Montgomery Drilling Co. License No. WID-907

Address P.O. Box 2502 Flowerfield Calif. 92303

Drilling Began 2-9-81 Completed 5-26-81 Type tools ROTARY Size of hole 12 1/2 in. 12 1/4 8 3/4

Elevation of land surface or _____ at well is 4376 ft. Total depth of well 9005 ft.

Completed well is ☐ shallow ☐ artesian. Depth to water upon completion of well _____ ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
			WELL TAKES FLUID	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
20"			SURF.	110	110	Open		
13 3/8"	455 51#		SURF.	1408	1408	Guide		
9 5/8"	455 40#		SURF.	5553	5553	2" 5/8" Guide Shoe		
7"	455 25#		5342	8980	3638	hung		

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
0	110	24"		1170	From inside - out
0	1408	17 1/2"		1034	Hal-barton
0	5553	12 1/4"		1786	Hal-barton

Section 5. PLUGGING RECORD

Plugging Contractor _____
 Address _____
 Plugging Method _____
 Date Well Plugged _____
 Plugging approved by: _____

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

August 17, 1981 FOR USE OF STATE ENGINEER ONLY

Date Received

Quad _____ FWL _____ FSL _____

File No. 130-564 Use Test Well Location No. 20.1.27.231

GEOTHERMAL SUNDRY NOTICE

The U.S. Geological Survey requests this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operations.

RS 53-27
APR 08 1982

4. LEASE SERIAL NO. NM-25557	
5. SURFACE MANAGER: BLM (X) FS () Other ()	
6. UNIT AGREEMENT NAME ---	
7. WELL NO. 53-27	8. PERMIT NO. 0142
9. FIELD OR AREA Radium Springs	
10. SEC. T., R., B. & M. Sec. 27, T20S, R1W, NMPM	
11. COUNTY Dona Ana	
12. STATE New Mexico	

1a. WELL TYPE: PRODUCTION () INJECTION () HEAT EXCHANGE () OBSERVATION (X) OTHER ()

1b. WELL STATUS:

OB

2. NAME OF LESSEE/OPERATOR

Lamar Hunt

3. ADDRESS OF LESSEE/OPERATOR

2500 First National Bank Bldg., Dallas, Texas 75202

13. LOCATION OF WELL OR FACILITY

2510.54' from E. line and 3521.23' from South line of Sec. 27,
Township 20 South, Range 1 West, NMPM

14. TYPE OF WORK

CHANGE PLANS ()	CONVERT TO INJECTION ()	PULL OR ALTER CASING ()
SITE AND ROAD CONSTRUCTION ()	FRACTURE TEST ()	MULTIPLE COMPLETE ()
CONSTRUCT NEW PRODUCTION FACILITIES ()	SHOOT OR ACIDIZE ()	ABANDON ()
ALTER EXISTING PRODUCTION FACILITIES ()	REPAIR WELL ()	OTHER (X)

15. DESCRIBE PROPOSED OPERATIONS (Use this space for well activities only. See instructions for current well conditions on reverse)

TD 9005'
Hang 7" liner
Top at 5343.25'
Bottom at 8980'

Slotted Intervals
7290' - 7418'
7504' - 7633'
7800' - 8057'



Well is shut in and to be used as an observation hole and later will be tested.

16. DESCRIBE PROPOSED OPERATIONS (Use this space for all activities other than well work)

(Use reverse side if needed)

17. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Lamar Hunt Geothermal Operations

DATE

(This space for Federal use)

APPROVED BY

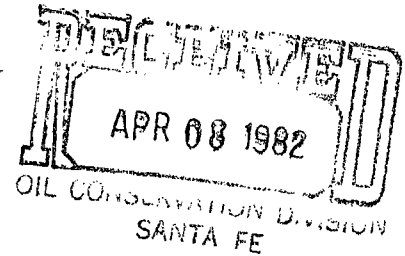
TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

This permit is required by law (30 U.S.C. 1023); regulations: 30 CFR 270.34, 30 CFR 270.35, 30 CFR 270.45, 30 CFR 270.71-1, 30 CFR 270.72; Federal Geothermal Lease Terms and Stipulations and other regulatory requirements. The United States Criminal Code (18 U.S.C. 1001) makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

HUNT ENERGY CORPORATION
2500 FIRST NATIONAL BANK BUILDING
DALLAS, TEXAS 75202



Telephone (214) 748-1300

April 6, 1982

New Mexico Oil Conservation Commission
P.O. Box 2088
SANTE FE, NEW MEXICO 87501

ATTENTION: CARL ULVOG

Dear Mr. Ulvog:

re: RADIUM SPRINGS - WELL No. 22

Enclosed are Forms G-103 and G-106 for the abandonment
of Well 22.

Also, for your files are copies of reports for Wells 25
and 53. These two wells are still being used for observation
purposes if you have any questions please call me at (214)748-
1300 ext. 464.

Very truly yours

HUNT ENERGY CORPORATION

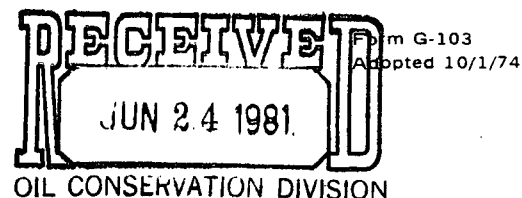
A handwritten signature in cursive script that reads "G. S. Bumgarner Jr.".

G. S. BUMGARNER JR.
GEOTHERMAL OPERATIONS

GSB:jv
Enclosures

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

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



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

SANTA FE	
Type of Lease	State <input type="checkbox"/> Fee <input type="checkbox"/>
5.a State Lease No. Federal NM-25557	

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PULL OR ALTER CASING <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER <input type="checkbox"/>		OTHER <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.

Method of Cement Placement:

20" 100' From inside - out
13 3/8" 1408' Haliburton Pump Truck
9 5/8" 5553' Haliburton Pump Truck

7" liner Top of liner hanger 5330'
Top of liner 5343'

Slotted intervals 7291' - 7418'
7505' - 7633'
7801' - 8058'

Bottom of liner 8980'

Total depth 9005'

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

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APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 6/26/81

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U. S. G. S.		
Operator		
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P. O. Box 2088, Santa Fe 87501

RECEIVED

FEB 12 1981

SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLSOIL CONSERVATION DIVISION
SANTA FE

5. Indicate Type of Lease
State <input type="checkbox"/> Fee <input type="checkbox"/>
5.a State Lease No.
Federal NM-25557

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1. Type of well	Geothermal Producer <input type="checkbox"/>	Temp. Observation <input type="checkbox"/>	7. Unit Agreement Name
	Low-Temp Thermal <input type="checkbox"/>	Injection/Disposal <input type="checkbox"/>	Wildcat
2. Name of Operator	Lamar Hunt		8. Farm or Lease Name
			Radium Springs
3. Address of Operator	2500 1st Nat'l Bank, Dallas, TX 75202		9. Well No.
			53
4. Location of Well	Unit Letter <u>G</u> <u>2510.54</u> Feet From The <u>East</u> Line and <u>3521.23</u> Feet From		10. Field and Pool, or Wildcat
	The <u>South</u> Line, Section <u>27</u> Township <u>20 S.</u> Range <u>1 W.</u> NMPM.		Wildcat
15. Elevation (Show whether DF, RT, GR, etc.)			12. County
4376 ft. GR			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 type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	
PULL OR ALTER CASING <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
OTHER <u>moving onto location</u> <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 <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.

Moving onto location
Preparing to spud

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

SIGNED Lamar Hunt TITLE Geothermal Operations DATE 2/6/81APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 2/18/81

CONDITIONS OF APPROVAL, IF ANY:

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

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501RECEIVED
FEB 12 1981SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

OIL CONSERVATION DIVISION	
Indicate Type of Lease	
State <input type="checkbox"/>	Fee <input type="checkbox"/>
5.a State Lease No.	
Federal NM-25557	
7. Unit Agreement Name	
8. Farm or Lease Name	
Radium Springs	
9. Well No.	
53	
10. Field and Pool, or Wildcat	
Wildcat	
12. County	
Dona Ana	

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 type="checkbox"/>
	Low-Temp Thermal <input type="checkbox"/>	Injection/Disposal <input type="checkbox"/>
Wildcat		
2. Name of Operator		
Lamar Hunt		
3. Address of Operator		
2500 1st Nat'l Bank, Dallas, TX 75202		
4. Location of Well		
Unit Letter	G	2510.54 Feet From The East Line and 3521.23 Feet From
The South	Line, Section 27	Township 20 S. Range 1 W. NMPM.
15. Elevation (Show whether DF, RT, GR, etc.)		
4376 ft. GR		

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 type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	
PULL OR ALTER CASING <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
OTHER moving onto location <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 <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.

Moving onto location
Preparing to spud

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

SIGNED Al Bumgarner Jr. TITLE Lamar Hunt Geothermal Operations DATE 2/6/81APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 2/18/81

CONDITIONS OF APPROVAL, IF ANY:

NO. OF COPIES RECEIVED	
DISTRIBUTION	
File	1 ✓
N.M.B.M.	1
U.S.G.S.	
Operator	1
Land-Office <u>BLM</u>	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

5. Indicate Type of Lease

STATE ☐ FEE ☐

5.a State Lease No.

Federal Lease NM-25557

1a. Type of Work	Drill <input checked="" type="checkbox"/>	Deepen <input type="checkbox"/>	Plug Back <input type="checkbox"/>
b. Type of Well	Geothermal Producer <input type="checkbox"/>	Temp Observation <input type="checkbox"/>	Low-Temp Thermal <input type="checkbox"/>
	Exploratory <input type="checkbox"/>	Injection/Disposal <input type="checkbox"/>	
2. Name of Operator	Lamar Hunt		
3. Address of Operator	2500 First National Bank Building, Dallas, Texas 75202		
4. Location of Well	UNIT LETTER <u>G</u> LOCATED <u>2510.54</u> FEET FROM THE <u>East</u> LINE AND <u>3521.23</u> FEET FROM THE <u>South</u> LINE OF SEC. <u>27</u> TWP. <u>20 S</u> RGE. <u>1 W</u> NMPM		

7. Unit Agreement Name

8. Farm or Lease Name

Radium Springs

9. Well No.

53

10. Field and Pool, or Wildcat
wildcat

12. County

Dona Ana

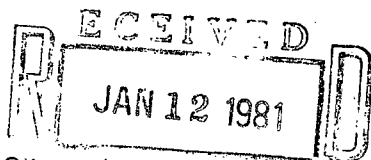
19. Proposed Depth	19A. Formation	20. Rotary or C.T.
9,000 feet	unknown	Rotary
21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor
4376' GR	\$10,000 #5204889	Montgomery Drilling
		22. Approx. Date Work will start
		January 15, 1981

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
26 in.	20 in.	94#	100 ft.	Per contract	
17 1/2 in.	13 3/8 in.	54.5#	900 ft.	590+	
12 1/4 in.	9 5/8 in.	40.0#	6,000 ft.	1920+	
8 1/2 in	7 in.	26.0#	Perf. liner to Total Depth if required		

Drilling and blowout prevention programs meet or exceed all
Federal requirements for this federal lease.

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



APPROVAL VALID FOR 90 DAYS
PERMIT EXPIRES 4-13-81
UNLESS DRILLING UNDERWAY

ON 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 prevention program.

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

Signed Roger A. Brown Title Lamar Hunt Geothermal Operations Date 1/8/81

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 1-13-81
CONDITIONS OF APPROVAL, IF ANY.

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

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

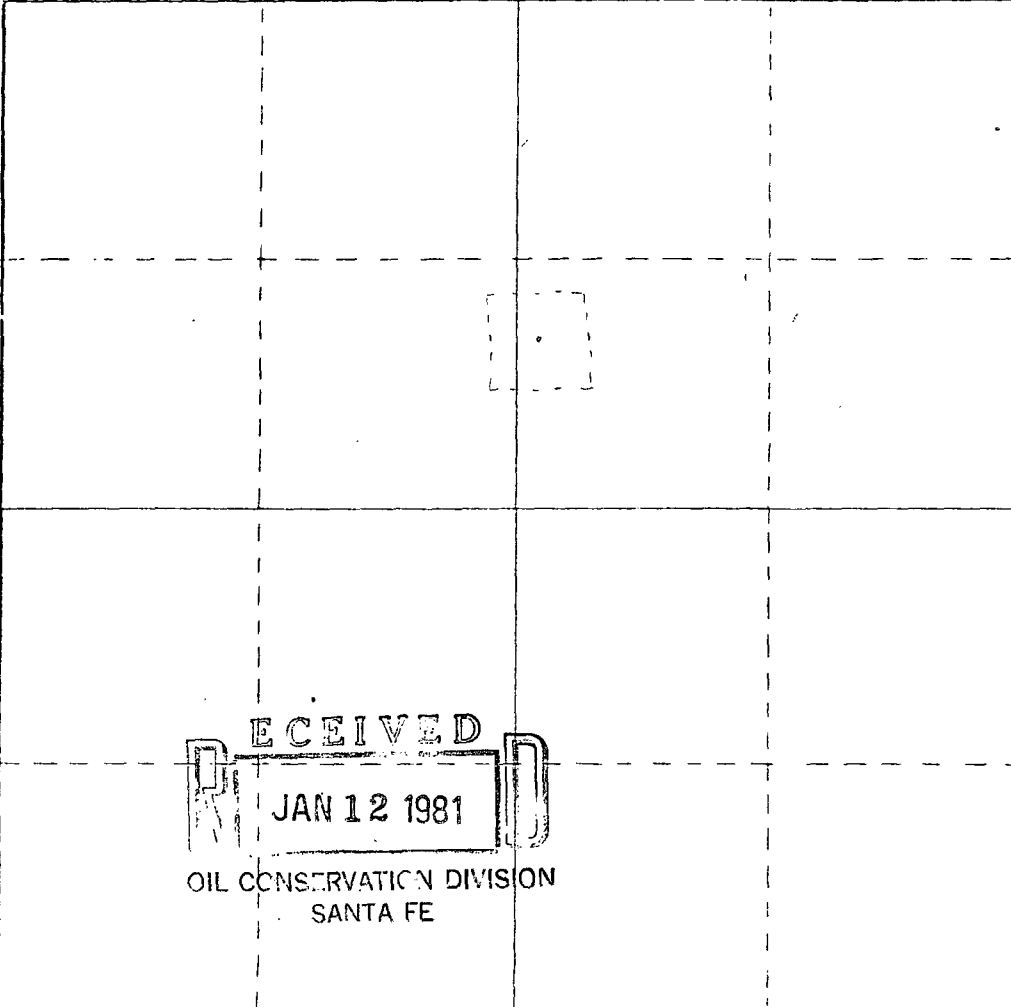
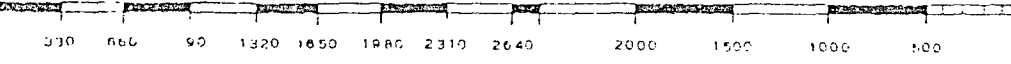
Operator Lamar Hunt		Lease Federal NM-2557		Well No. 53	
Unit Letter G	Section 27	Township 20 South	Range 1 West	County Dona Ana	
Actual Footage Location of Well: 2510.54 feet from the East line and 3521.23 feet from the South line					
Ground Level Elev. 4376 feet	Producing Formation unknown		Pool N/A	Dedicated Acreage: 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>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>	
<div>RECEIVED JAN 12 1981 OIL CONSERVATION DIVISION SANTA FE</div>		Name G. S. Bumgarner, Jr.	
		Position Geologist	
		Company Hunt Energy Corporation	
		Date January 7, 1981	
		<i>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.</i>	
		Date Surveyed January 6, 1980	
		Registered Professional Engineer and/or Land Surveyor	
		Jorge Moy	
Certificate No. NM 5939			

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL ☒ DEEPEN ☐ PLUG BACK ☐
 b. TYPE OF WELL
 OIL WELL ☐ GAS WELL ☐ OTHER Geothermal ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐
 2. NAME OF OPERATOR
 Lamar Hunt
 3. ADDRESS OF OPERATOR
 2500 First National Bank Building, Dallas, Texas 75202
 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface
 2510.54 ft. from the East line and 3521.23 feet from the
 South line of Sec. 27, Twp. 20 S., Rge 1 W,
 At proposed prod. zone
 Unknown NMPM
 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

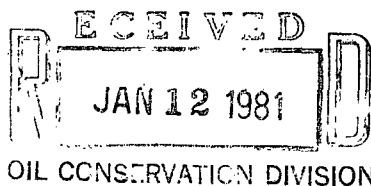
5. LEASE DESIGNATION AND SERIAL NO.
 Federal NM-25557
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 7. UNIT AGREEMENT NAME
 8. FARM OR LEASE NAME
 Radium Springs
 9. WELL NO.
 53-27
 10. FIELD AND POOL, OR WILDCAT
 Wildcat
 11. SEC., T., R., M., OR BLK.
 AND SURVEY OR AREA
 Sec. 27, Twp 20 S, Rge 1 W,
 NMPM
 12. COUNTY OR PARISH
 Dona Ana
 13. STATE
 NM

15. DISTANCE FROM PROPOSED*
 LOCATION TO NEAREST
 PROPERTY OR LEASE LINE, FT.
 (Also to nearest drlg. unit line, if any) 2510.54 ft.
 16. NO. OF ACRES IN LEASE
 2560.00
 17. NO. OF ACRES ASSIGNED
 TO THIS WELL
 18. DISTANCE FROM PROPOSED LOCATION*
 TO NEAREST WELL, DRILLING, COMPLETED,
 OR APPLIED FOR, ON THIS LEASE, FT. 6466.1 ft.
 19. PROPOSED DEPTH
 9000 ft.
 20. ROTARY OR CABLE TOOLS
 Rotary
 21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 4376 ft GR
 22. APPROX. DATE WORK WILL START*
 Jan. 15, 1981

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT

See attached drilling program.



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. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Roger L. Barnes TITLE Lamar Hunt Geothermal Operations DATE 1/8/81

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

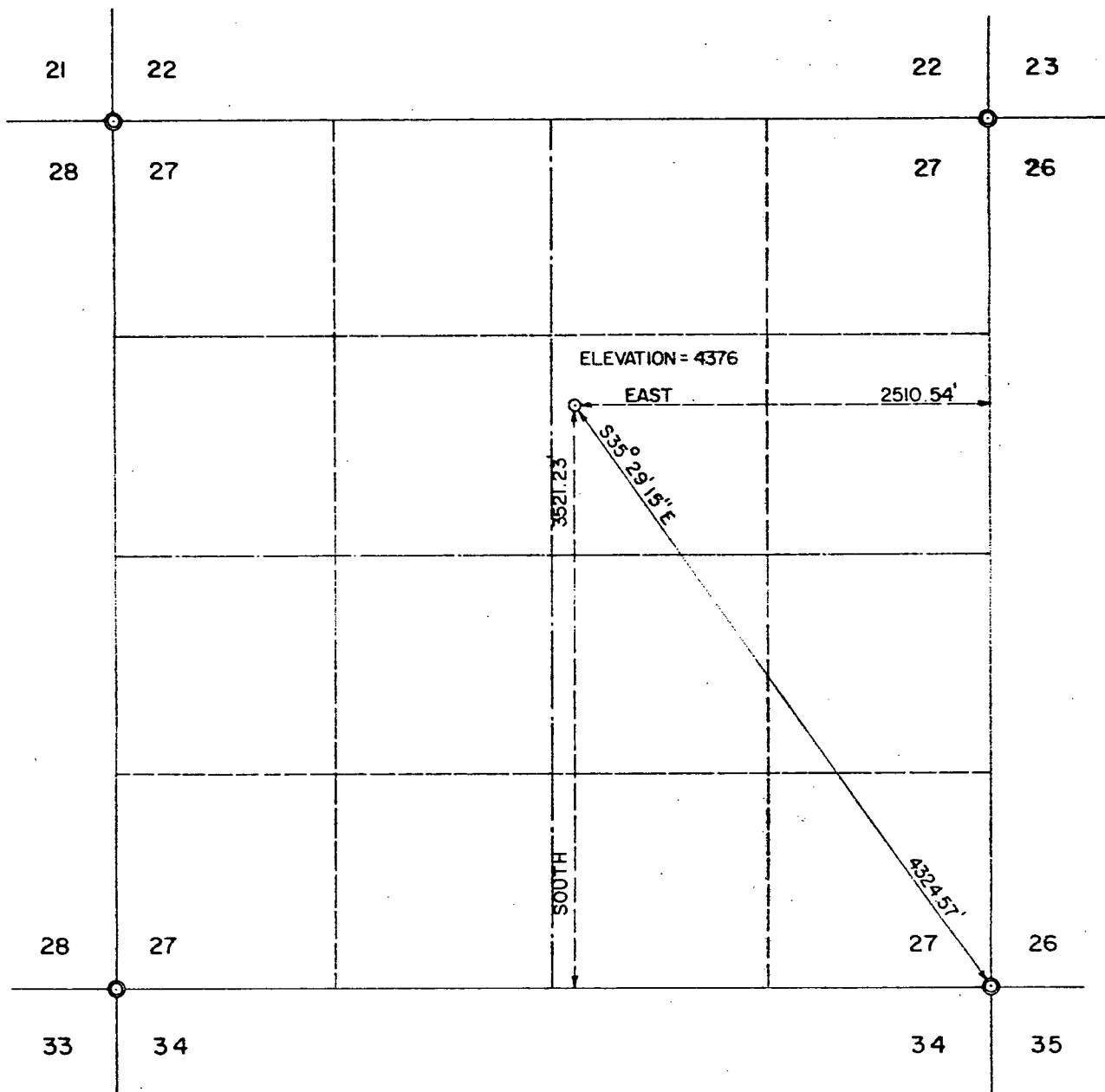
APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

PLAT OF SURVEY SHOWING THE LOCATION OF A GEOTHERMAL WELL
 LOCATED IN SECTION 27, T.20S., R.1W., N.M.P.M. OF THE U.S.G.L.O. SURVEYS
 NORTH OF RADIUM SPRINGS, DONA ANA COUNTY, NEW MEXICO

SCALE: 1" = 1000'

JANUARY 5, 1981



SCALE: 1" = 1000'

RECEIVED

JAN 12 1981

OIL CONSERVATION DIVISION
 SANTA FE

I HEREBY CERTIFY THAT I AM A REGISTERED
 LAND SURVEYOR IN THE STATE OF NEW MEXICO
 AND THAT THIS PLAT WAS MADE BY ME OR
 UNDER MY SUPERVISION FROM THE NOTES OF
 AN ACTUAL FIELD SURVEY AND THAT IT IS
 TRUE AND CORRECT TO THE BEST OF MY
 KNOWLEDGE AND BELIEF.

George May

HUNT GEOTHERMAL OPERATIONS

Well Location

Radium Springs No. 53-27

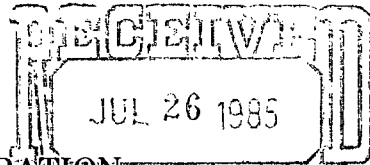
PREPARED BY:

B&M Surveys, Inc.



Land Surveying

LAS CRUCES, NEW MEXICO



HUNT ENERGY CORPORATION

2400 THANKSGIVING TOWER

SANTA FE

DALLAS, TEXAS, 75201

July 22, 1985

Mr. R. E. Johnson
Oil Conservation Division
P.O. Box 2088
State Land Office Bldg.
Santa Fe, NM 87501

Dear Mr. Johnson:

Thank you for your letter of July 19, 1985 calling my attention to the request to release the bond on our geothermal well #25-34 at Radium Springs, Dona Ana County. Your records are correct that the well has not been plugged and abandoned. The request to release the bond was an apparent misunderstanding within Hunt and between Hunt and our bonding agent. The bond will remain in force.

Well 25-34 is still shut in. As you may remember, Hunt had proposed a development project for the prospect. This proposal failed to materialize because El Paso Electric Co. was not interested in negotiating an agreement with us. Hunt still hopes to develop the prospect and use well 25-34 as a production well, but we cannot proceed until we find a legitimate buyer for the heat and/or electricity. The well will remain shut in until then. As soon as we reach an agreement with a buyer, we will submit the appropriate applications for permits.

While I am unable to set a definite time frame to our program, I would be happy to update you on our progress at any time. Please write or call me at 214/880-8420.

Yours truly,

A handwritten signature in cursive script, reading "Roger L. Bowers", is written above the typed name.

Roger L. Bowers
Geothermal Operations Manager

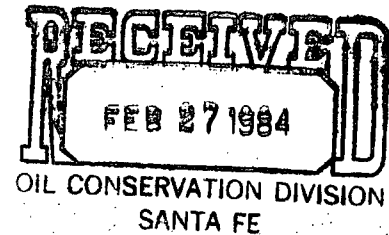
RLB:dsh

Harry N. Bailey

25256 Terreno Dr., Mission Viejo, Ca. 92675
(714) 837-9041 835-1911 (213) 924-1150

February 10, 1984

Hunt Energy Corporation
2800 Thanksgiving Tower
Dallas, Texas 75201



Attention: Mr. Roger L. Bowers,
Geothermal Operations

Dear Mr. Bowers:

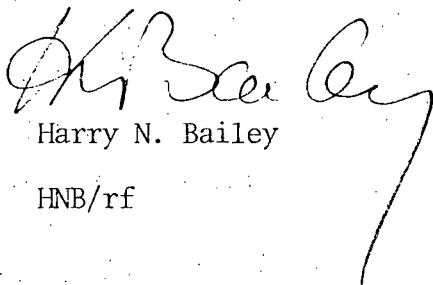
Thank you for your letter of January 9, 1984, received this week. The questions and comments listed indicate the quality of expertise which we will have to apply before proceeding further with this development.

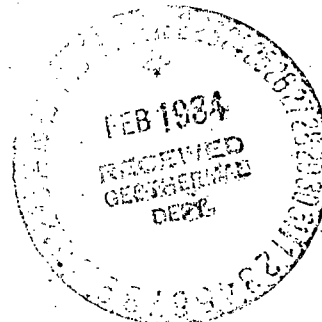
Rest assured we have no desire to embark on any course that will unnecessarily cool down a proven hot water production zone or effect the quality of existing producing fresh water resources which are equally valuable to us.

As also mentioned before, we have a community of interest with Hunt in the orderly development and application of these resources at Radium Springs. Good communication as demonstrated by your letter can only assist toward that end.

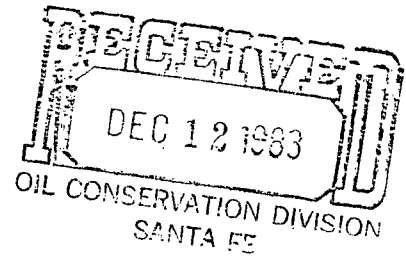
As for Section 3 mentioned in your last paragraph "...section 3 is federal land.", we do own 1/4 of this section and as you know are considering this as a site for a reinjection well. We, of course, are aware that the BLM has mineral rights to the entire section which they have leased to Hunt.

Sincerely,


Harry N. Bailey
HNB/rf



LAMAR HUNT
GEOTHERMAL OPERATIONS
2400 Thanksgiving Tower
Dallas, Texas 75201



December 6, 1983

Carl Ulvog
New Mexico State Oil & Gas
Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87503

Dear Mr. Ulvog:

A copy of our company report on the flow test of Radium Springs Well 25-34 is being sent to you in a separate package. The report contains all of the raw data obtained from the test plus interpretations of most of the data.

This same report was submitted to the State Engineer's office to fulfill their requirements. If you have any questions or comments about the report, please do not hesitate to contact Dave Lloyd or me.

Yours truly,

LAMAR HUNT

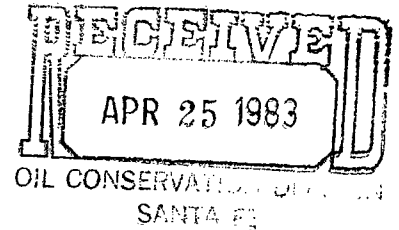
Roger L. Bowers,
Geothermal Operations

RLB/ct

P.S. Please note our new address and phone numbers:
2400 Thanksgiving Tower
Dallas, Texas 75201

Roger Bowers (214) 880-8420
Dave Lloyd (214) 880-8421

LAMAR HUNT
2800 THANKSGIVING TOWER
DALLAS, TEXAS 75201



April 21, 1983

Mr. Joe D. Ramey
Division Director
State of New Mexico
Energy and Minerals Dept.
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

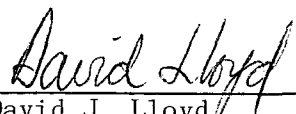
Dear Mr. Ramey;

Pursuant to the stipulations outlined in your approval of our "application to discharge produced geothermal water for testing purposes" at Radium Springs, New Mexico, I am formally notifying you of our intent to begin the testing of our well #25-34 (LRG 503).

Dirtwork to deepen and modify the existing pits has already begun. Perforating is planned for Wednesday, April 27. Wellhead modifications (BOPE, valves, flowlines, etc.) will begin on Thursday, April 28. If everything proceeds as planned, we will be ready to begin air-jetting on Tuesday, May 3, 1983. I will notify Carl Ulvog and Oscar Simpson one week prior and 36 hours prior to commencement of the test.

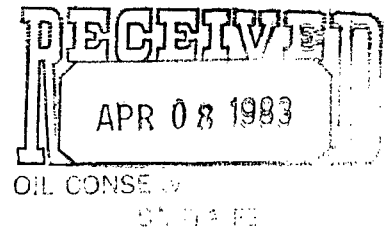
Sincerely,

LAMAR HUNT


David J. Lloyd
Geothermal Operations

c.c. Carl Ulvog
Oscar Simpson
Roger Bowers

LAMAR HUNT
2800 Thanksgiving Tower
Dallas, Texas 75201



April 6, 1983

Mr. Joe D. Ramey
Director, Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, NM 87501

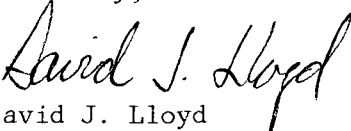
Dear Mr. Ramey;

For purposes of information, this letter advises you of a slight change of plans for our flow test of Radium Springs well 25-34. As you can see by the attached sketch, we are changing the configurations of the holding ponds to provide for an increased capacity and better percolation.

We also wish to advise you that the test will be conducted using air-jetting in lieu of mechanical pumping to bring the water to the surface. All other terms and conditions previously stipulated by you will be observed.

Our current plans envision that well modification will be completed by the end of April, 1983, with air-jetting planned for the first week of May. We will advise you of exact dates for the air-jet test at least 10 days in advance.

Sincerely,


David J. Lloyd
Geothermal Operations

1 Enclosure
Sketch of Holding Ponds

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

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

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

5. Indicate Type of Lease State <input type="checkbox"/> Fee <input type="checkbox"/>	
5.a State Lease No. FED NM-25557	
7. Unit Agreement Name	
8. Farm or Lease Name Radium Springs	
9. Well No. 25-34 (LRG 503)	
10. Field and Pool, or Wildcat	
12. County Dona Ana	

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.)

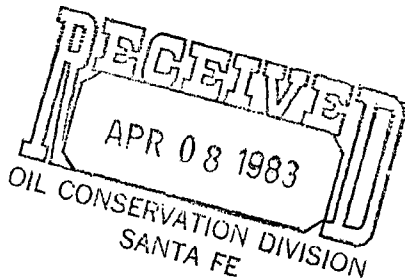
1. Type of well Geothermal Producer <input type="checkbox"/> Temp. Observation <input type="checkbox"/> Low-Temp Thermal <input checked="" type="checkbox"/> Injection/Disposal <input type="checkbox"/>	
2. Name of Operator Lamar Hunt	
3. Address of Operator 2800 Thanksgiving Tower, Dallas, Texas 75201	
4. Location of Well Unit Letter <u>L 968.37</u> Feet From The <u>West</u> Line and <u>2335.13</u> Feet From The <u>South</u> Line, Section <u>34</u> Township <u>205.</u> Range <u>1 Q.</u> NMPM.	
15. Elevation (Show whether DF, RT, GR, etc.) 4240 Ft. Gr.	

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

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

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.

Operator proposes to air-jet the well for 3-5 days. See attachment for details.



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

SIGNED David J. Lloyd TITLE LAMAR HUNT GEOTHERMAL OPERATIONS DATE 6 April 1983

APPROVED BY Carl Ulloa TITLE DISTRICT SUPERVISOR DATE April 8, 1983

PROPOSED PUMP TEST
WELL 25-34 (LRG-503)
RADIUM SPRINGS, NEW MEXICO

One zone (approximately 2390 feet to 2420 feet) will be tested to determine water quality and reservoir characteristics for potential direct-use applications. One 3-5-day step test will be conducted to evaluate the zone. Water produced during the tests will be contained in existing 5 ponds at the well site and will be allowed to percolate into the subsurface, in accordance with surface disposal order, OCD letter received March 14, 1983. (Copy attached.)

The test zone will be perforated at planned 4 shots per foot. A temporary air line 2 3/8-inch OD upset tubing will be set to 700 teet, and used with sufficient compressed air to jet planned rates of up to 1500 gpm. A BOP well head will be used to control flow. Test is planned for three stages of 500, 750, and 1000 gpm, each of 24-hours duration. Depending on aquifer characteristics, subsequent testing, up to 48 hours total duration, will be used to test higher flow rates. Water samples will be acquired at start of flow test and during subsequent step increases. A continuous record will be acquired of flow rates, temperature, and draw-down levels through-out the test.

At the conclusion of the tests the well will be shut in and locked.



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

Lamar Hunt
7800 Thanksgiving Tower
Dallas, Texas 75201

Attention: Roger L. Bowers
Geothermal Operations



POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Re: Discharge of Geothermal
Water from Test Well 25-34
near Radium Springs, NM

Dear Sir:

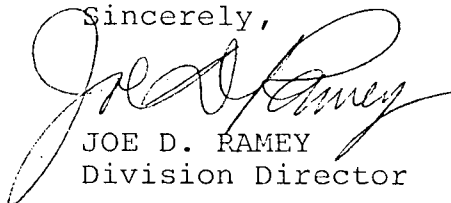
Pursuant to your application of November 30, 1982, and the additional information supplied thereafter, you are hereby granted permission to discharge produced geothermal water for testing purposes if the procedures as outlined in your application are followed.

The Oil Conservation Division conditionally grants your application with the provision that a report be submitted to the Division that summarizes the results of the test. The report shall include all water analysis conducted on the produced water and a description along with results of the pump test on well No. 25-34. The report will be submitted to the OCD within 3 months after completion.

The Division requests that you notify the District IV Supervisor, Carl Ulvog, and Oscar Simpson, Water Resource Specialist, one week and 36 hours in advance of starting the test so they may have the opportunity of witnessing the test.

If you have any questions regarding this matter, you may contact Oscar Simpson at (505) 827-5822.

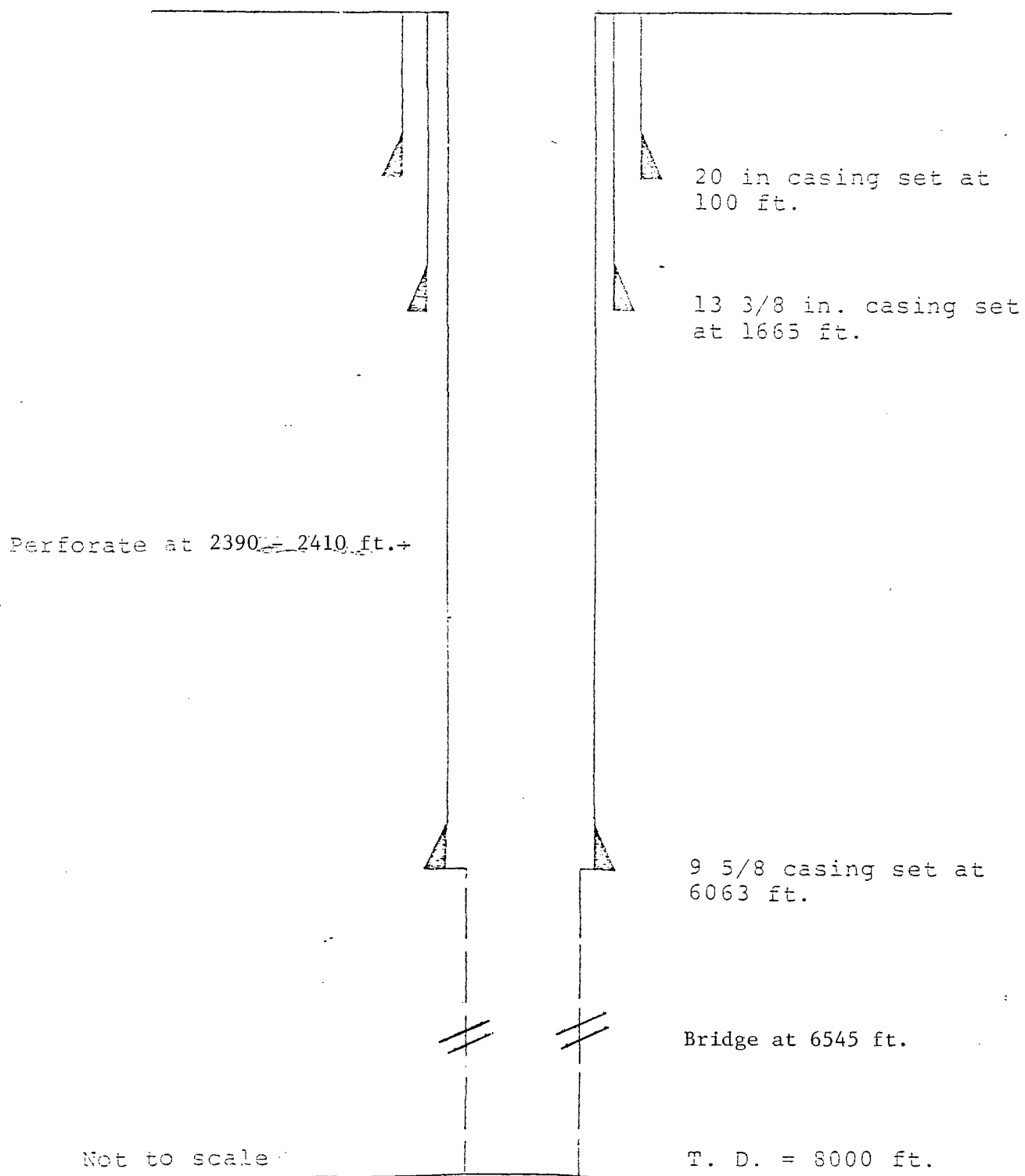
Sincerely,


JOE D. RAMEY
Division Director

JDR/OS/dp

SCHEMATIC DIAGRAM
PROPOSED TESTING PROGRAM

RADIUM SPRINGS 25-34



NO. OF COPIES RECEIVED	
DISTRIBUTION	<input checked="" type="checkbox"/>
File	<input checked="" type="checkbox"/>
N. M. B. M.	
U. S. G. S.	
Operator	
Land Office	

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

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

5. Indicate Type of Lease State <input type="checkbox"/> Fee <input type="checkbox"/>
5.a State Lease No. Federal NM-25557

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.)

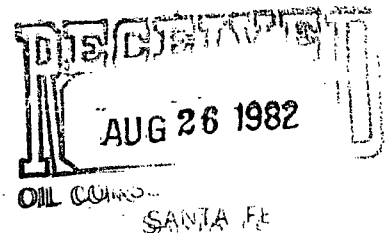
1. Type of well Geothermal Producer <input type="checkbox"/> Temp. Observation <input type="checkbox"/> Low-Temp Thermal <input checked="" type="checkbox"/> Injection/Disposal <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator LAMAR HUNT	8. Farm or Lease Name RADIUM SPRINGS
3. Address of Operator 2500 First National Bank Bldg., Dallas, TX 75202	9. Well No. 25557 (LRG-503)
4. Location of Well Unit Letter L 968.37 Feet From The West Line and 2,335.13 Feet From The South Line, Section 34 Township 20 S Range 1W NMPM.	10. Field and Pool, or Wildcat Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4240 Ft. GR	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 type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>		COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG & ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input checked="" type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER Pump. Test <input checked="" type="checkbox"/>		OTHER <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.

Operator proposes to pump test well for 10 days.
See attachment for details.



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

SIGNED *Roger L. Bowers* TITLE LAMAR HUNT GEOTHERMAL OPERATIONS DATE 8-23-82

APPROVED BY *Carl Ulvog* TITLE DISTRICT SUPERVISOR DATE 12/6/82

CONDITIONS OF APPROVAL, IF ANY:

PROPOSED PUMP TEST
WELL 25-34 (LRG-503)
RADIUM SPRINGS, NEW MEXICO

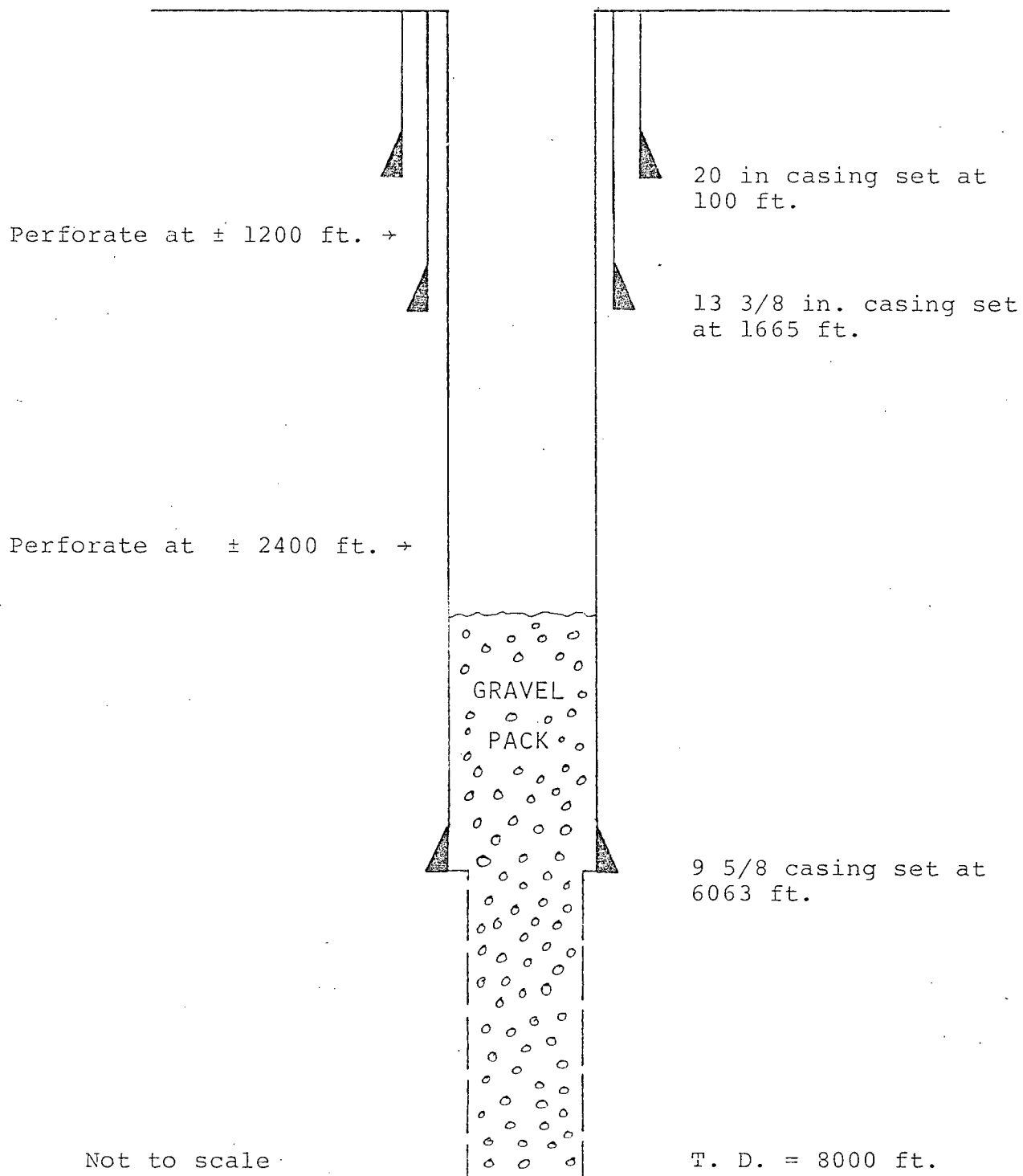
Two zones (approximately 1180 feet to 1230 feet and 2380 feet to 2430 feet) will be pump tested to determine water quality and reservoir characteristics for potential direct-use applications. Two 5-day step pump tests will be conducted to evaluate the two zones. Water produced during the tests will be contained in existing sumps at the well site and will be allowed to percolate into the subsurface.

The well will be back-filled with gravel to approximately 2500 feet. The upper zone will then be perforated and a 5 1/2 " pump column (REDA pump) will be run in the hole followed by the installation of a flow line and monitoring system. The 5-day step pump test will then be conducted. The test of the lower zone will then be conducted in a similar fashion.

At the conclusion of the tests the well will be shut in and locked.

SCHEMATIC DIAGRAM
PROPOSED TESTING PROGRAM

RADIUM SPRINGS 25-34



Form: USGS 9-1958

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY, CONSERVATION DIVISIONForm Approved
Budget Bureau No. _____

GEOTHERMAL SUNDRY NOTICE

The U.S. Geological Survey requests this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operations.

a. WELL TYPE: PRODUCTION () INJECTION () HEAT EXCHANGE () OBSERVATION () OTHER ()

b. WELL STATUS:

Shut in

NAME OF LESSEE/OPERATOR

LAMAR HUNT, OPERATOR

ADDRESS OF LESSEE/OPERATOR

2500 First National Bank Bldg., Dallas, TX 75202

3. LOCATION OF WELL OR FACILITY

968.37' FWL, 2,335.13' FSL, Sec. 34

4. TYPE OF WORK

CHANGE PLANS ()	CONVERT TO INJECTION ()	PULL OR ALTER CASING ()	<input checked="" type="checkbox"/>
SITE AND ROAD CONSTRUCTION ()	FRACTURE TEST ()	MULTIPLE COMPLETE ()	
CONSTRUCT NEW PRODUCTION FACILITIES ()	SHOOT OR ACIDIZE ()	ABANDON ()	
ALTER EXISTING PRODUCTION FACILITIES ()	REPAIR WELL ()	OTHER Flow Test ()	<input checked="" type="checkbox"/>

5. DESCRIBE PROPOSED OPERATIONS (Use this space for well activities only. See instructions for current well conditions on reverse)

Operator proposes to pump test well for 10 days.

See attachment for details.

6. DESCRIBE PROPOSED OPERATIONS (Use this space for all activities other than well work)

7. I hereby certify that the foregoing is true and correct

LAMAR HUNT, GEOTHERMAL
OPERATIONS

(Use reverse side if needed)

SIGNED Roger L. Brown TITLE _____ DATE 8-23-82

(This space for Federal use)

APPROVED BY Douglas M. Kozz TITLE Acting Salt Lake City District Geothermal Supervisor DATE 12/28/82

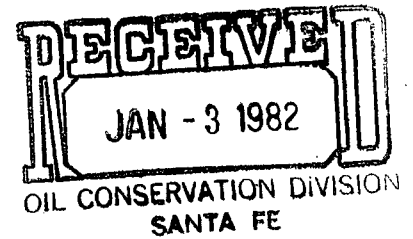
CONDITIONS OF APPROVAL, IF ANY:

Approved pursuant to EA 147-80, APD 0118, and in conjunction with State of NM permit this permit is required by law (30 U.S.C. 1023); regulations: 30 CFR 270.34, 30 CFR 270.35, 30 CFR 270.45, 30 CFR 270.71-1, 30 CFR 270.72; Federal Geothermal Lease Terms and Stipulations and other regulatory requirements. The United States Criminal Code (18 U.S.C. 1001) makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

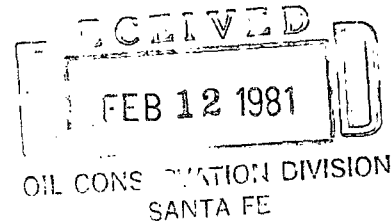
See attached conditions.

(See instructions on reverse side)

CONDITIONS OF APPROVAL



1. The Acting Salt Lake City District Geothermal Supervisor will be notified immediately prior to commencement of operations.
2. An operations report will be called in daily to the District Supervisor. Phone (702) 784-5676
3. At least 24 hours advance notice will be provided to the District Supervisor for all BOPE and cement plug pressure tests.



List of Lost Circulation
Intervals in Lamar Hunt
25-34 Radium Spring Federal
Sec. 34, T.20S., R.1W.

<u>Depth</u>	<u>Remarks</u>
844'	LCM - No returns - Cemented zone
856' - 857'	Drilled ahead - No returns Cemented 50 bbls/Hr.
870' - 890'	LCM
1013' - 1014'	Lost 6 bbls mud
1017' - 1019'	Lost 6 bbls mud
1031' - 1032'	Lost circulation - Cemented zone
1061' - 1062'	Lost circulation
1063' - 1064'	Lost circulation - Cemented zone
1077'	Cemented zone
1103' - 1108'	Lost circulation - LCM
1111' - 1115'	Lost circulation - LCM
1170' - 1171'	Lost circulation - 220 bbls.
1176'	Lost circulation
1188' - 1189'	Lost circulation - Cemented
1192'	Cemented with 1265 bbls - no returns Switched to aerated water. Lost 5400 bbls by 1263'
1500'	Losing 200-300 bbls. of water per hour
1600'	Losing 200-300 bbls. of water per hour Set casing 13-3/8 at 1665'

<u>Depth</u>	<u>Remarks</u>
1682'	Lost circulation 30 bbls - 10-40 bbls per hour
1745'	Lost circulation 10-15 bbls per hour
1822' - 1823'	Lost circulation 10 bbls per hour
1890'	Losing 10-15 bbls per hour from 1890'
2070'	Losing 40-50 bbls per hour
2157'	LCM and losing 5 bbls per hour
2270'	Losing 20 bbls per hour
2400' - 2415'	Lost circulation - set 2 cement plugs No returns
3130' - 3230'	No returns
3460' - 3500'	No returns - Might be due to lost circulation zone at 2400' and 3130'
3590' - 3620'	" " " "
3750' - 3800'	" " " "
4030' - 4070'	" " " "
4750' - 4760'	" " " "
4790' - 4820'	" " " "

Short Well Test at 700' Depth
Radium Springs Well

<u>Time</u>	<u>Pressure</u> <u>Pounds/Sq.In.</u>	<u>Temp.</u> <u>°F</u>	<u>Remarks</u>
7:01 - on loc.			
7:05 - begin test	120	50	700' deep
7:06	156	51	"
7:08 - 1st flow	141 - 156	151	" 1 minute blow
7:08 - " "	137	155	"
7:10	137	183 peak	Still blowing
7:12	160	182	"
7:14	154	189	"
7:15	154	188	"
7:16	153	185	"
7:18	150	186	"
7:20	149	187	"
7:22	152	182	"
7:24	151	178	Flow decreasing liquid
7:25	151	175	" " "
7:26	151	175	Pulsing now but flows continue
7:28	152	175	Steady flow
7:30	152	177	"

<u>Time</u>	<u>Pressure</u> <u>Pounds/Sq.In.</u>	<u>Temp.</u> °F	<u>Remarks</u>
7:33	154	179	Steady flow
7:34 - Compressor off	112	180	End at 700'
7:35 - Flow stopped			

Short Well Test at 1100' Depth
Radium Springs Well.

<u>Time</u>		<u>Pressure</u> <u>Pounds/Sq.In.</u>	<u>Temp.</u> °F	<u>Remarks</u>
7:44	Lower Pipe			
7:55	Compressor on	0'	100	
7:57		166	96	
7:58		200	94	
8:00	Peaked	313	91	
8:01		309	89	
8:03		309	87	
8:04		309	85	
8:05		309	84	
8:06		309	82	
8:07	Broke	309	81	
8:07.5	Flow starts	279	181	Starts flowing
8:09		309	179	Flowing
8:10		308	180	"
8:10	Flow stops	310	176	Hot pipe
8:11	Flow starts	304	176	Flowing
8:12		307	181	"
8:13		304	188	"
8:13		300	190	"
8:13		295	187	"
8:14		301	188	"
8:15		305	186	"

<u>Time</u>		<u>Pressure</u> <u>Pounds/Sq.In.</u>	<u>Temp.</u> °F	<u>Remarks</u>
8:16		306	186	Flowing
8:17		307	188	"
8:17.5		303	190	"
8:18		303	191	"
8:18		302	189	"
8:19		303	187	"
8:20		309	183	"
8:21		305	182	Flow decreasing
8:21		307	184	Flow steady
8:22		306	185	"
8:25	Flow about 1/2 pipe in dia.	308	186	Flow surges
8:26		309	187	"
8:27		305	190	"
8:27	Flow more vigorous	305	191	"
8:27		310	190	"
8:28		312	190	"
8:29		309	192	Steady flow
8:29		307	194	"
8:30		303	197	"
8:30	Flow vigorous Slight "Bell"	300	196	"
8:32		307	196	"
8:32		306	198	"

<u>Time</u>	<u>Pressure</u> <u>Pounds/Sq.In.</u>	<u>Temp.</u> °F	<u>Remarks</u>
8:32.5	305	199	Steady flow
8:34	306	200	"
8:35	306	200	"
8:36	306	201	"
8:36	306	202	"
8:37 Steady	307	202	"
8:37.5	307	203	"
8:38	307	203	"
8:38	307-6	204	"
8:39 Slight press. & temp. waver	307	204	"
8:40	307	205	"
8:41	307	205	"
8:42	307	206-5	"
8:43	307	207	Slight belling on flow
8:44 Pulsing, slight "Bell" shape on flow	307	207-6	
8:45	307	207	
8:46	307	208	
8:47	307	208	
8:48	307	208	
8:48.5	308	209	
8:49	307	209	
8:50	307	209	

<u>Time</u>	<u>Pressure</u> <u>Pounds/Sq.In.</u>	<u>Temp.</u> °F	<u>Remarks</u>
8:51	308	209	
8:51.5	308	209	
8:52	308	210	
8:53	308	210	
8:54	308	210	Steady
8:55	308	210	
8:55.5	308	211	
8:56	308	211	
8:57	308	211	
8:58	308	211	
8:59	308	211	
9:00	308	211	
9:01	308	211	
9:01.5	308	212	
9:03	308	212	
9:04	308	212	
9:05	308	212	
9:06	Bell more steady	308	212
9:07	308	212	
9:09	308	212	
9:10	308	212	
9:11	1/4 Bell	308	213
9:12	308	213	
9:13	308	213	

<u>Time</u>		<u>Pressure</u> <u>Pounds/Sq.In.</u>	<u>Temp.</u> °F	<u>Remarks</u>
9:14		308	213	
9:15		308	213	
9:16		308	213	
9:17		308	213	
9:18		308	213	
9:19		308	213	
9:20		308	213	
9:21		308	213	
9:22		308	214	
9:23		308	214-13	
9:24		309	214	
9:25		309	214	
9:26		-	-	
9:27		-	-	
9:28	1/4 Bell	309	214	
9:29	"	309	213-14	
9:30		308	214	
9:31		309	214-15	
9:32		308	214	
9:33		309	214	
9:34		309	214	
9:34.5		309	215	
9:35		309	214	Flickers

<u>Time</u>	<u>Pressure</u> <u>Pounds/Sq. In.</u>	<u>Temp. °F</u>	<u>Remarks</u>
9:36	309	214	
9:37	308	214	
9:38	309	214	
9:39	309	215-14	Flickers
9:40	309	215-14	"
9:41	309	215-14	"
9:42	309	214	
9:43	309	215-14	
9:44	309	215	
9:45	309	215	
9:46	309	215-14	
9:47	309	215-14	
9:48	309	215	
9:49	309	215	
9:50	309	215	
9:51	309	215	
9:52	309	215	
9:53	309	215	
9:54	309	215	
9:55	1/4 Bell Steady w/same pulse	309	215
9:56	309	215	

<u>Time</u>	<u>Pressure</u> <u>Pounds/Sq.In.</u>	<u>Temp. °F</u>	<u>Remarks</u>
9:57	309	215	
9:58	309	215	
9:59	309	215	
10:00	309	215	
10:01	309	215-16	
10:02	309	215-16	
10:03	309	215-16	
10:04	309	215-16	
10:05	309	215-16	
10:06	309	215-16	
10:07	309	215-16	
10:08	309	215-16	
10:09	309	215-16	
10:10	309	215-16	
10:11	309	215-16	
10:12	309	216-15	
10:13	309	215-16	
10:14	309	216-15	
10:15	309	216-15	
10:16	309	216	Fairly steady now
10:17	309	216	
10:18	309	216	
10:19	309	215-16	
10:20	309	216-15	

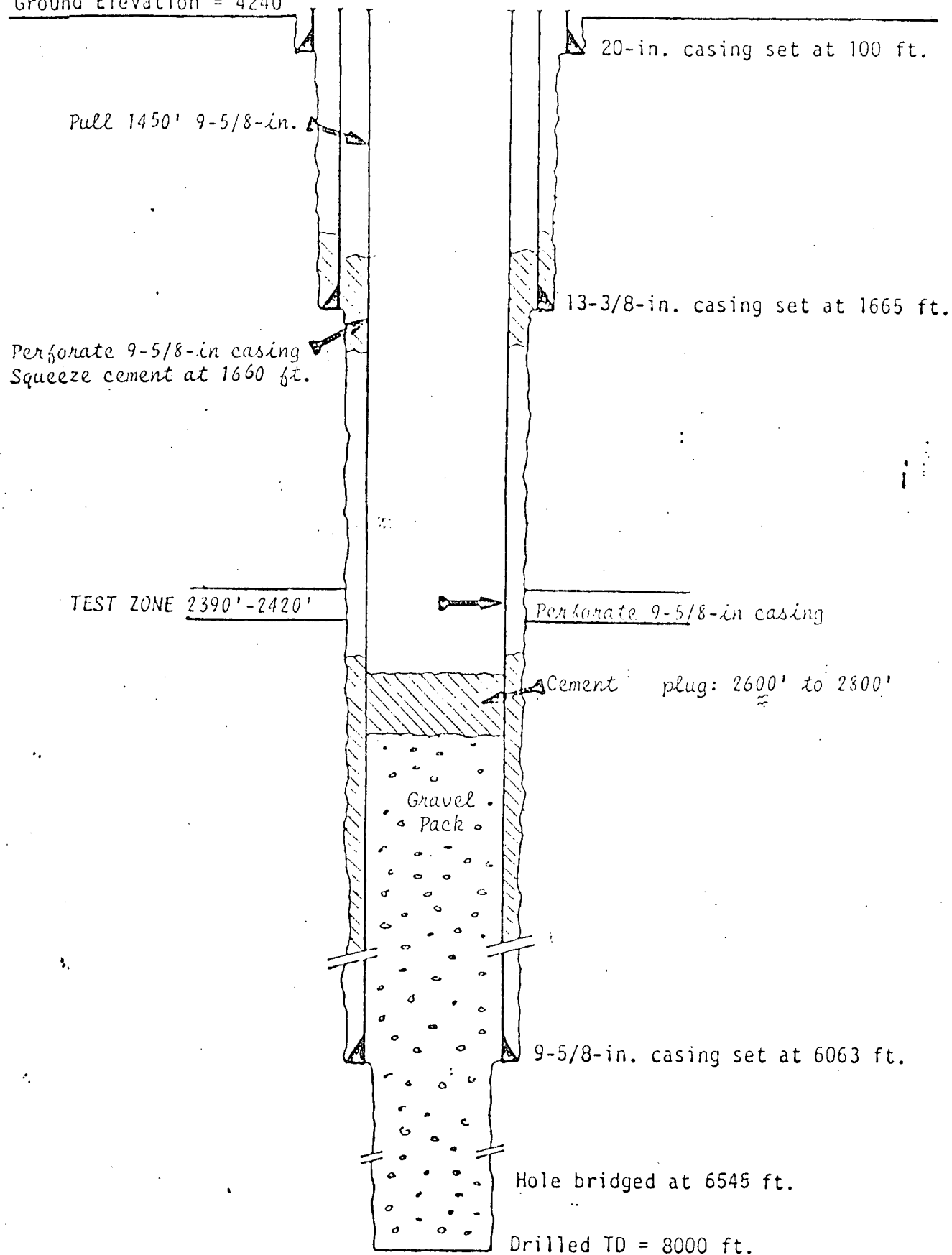
<u>Time</u>	<u>Pressure</u> <u>Pounds/Sq. In.</u>	<u>Temp. °F</u>	<u>Remarks</u>
10:21	309	216-15	
10:22	309	216-15	
10:23	309	216-15	
10:24	309	216-15	
10:25	309	216-15	
10:26	309	216	
10:27	309	216	
10:29	310	216	
10:29	311	216	
10:30	310	216	Flicker to 217
10:31	309	217-16	
10:32	310	217-16	
10:33	309	216-17	
10:34	309	216-17	
10:35	Took Ph & Salinity	309	216
10:36		309	216-17
10:37		309	216-17
10:38	1/3 bell to 1/4 bell - white cone	309	217-16
10:39		309	216-17

<u>Time</u>	<u>Pressure</u> <u>Pounds/Sq. In.</u>	<u>Temp. °F</u>	<u>Remarks</u>
10:40	309	216-17	
10:41	309	216-17	
10:42	309	217	
10:43	309	217	
10:44	309	217	
10:45	309	217	
10:46	Compressor off 246	216	
10:46.5	234	216	
10:47	212	214	
10:47.5	184	206	
10:48	Flow ended 151	202	
10:48-3/4	Hot air 106	203	
10:49	88	200	
10:50	19	202	
10:50			
10:50-1/4	0	200	Hot Air

Stopped Test

SCHEMATIC DIAGRAM
PROPOSED MODIFICATION PROGRAM
Radium Springs Well #25-34

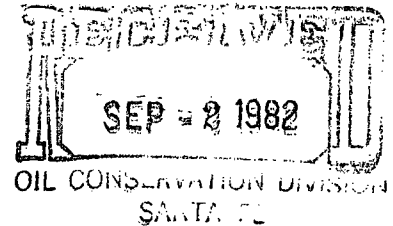
Ground Elevation = 4240'



HUNT ENERGY CORPORATION
1601 ELM STREET
2800 THANKSGIVING TOWER
DALLAS, TEXAS 7520

August 31, 1982

New Mexico State Oil &
Gas Commission
Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87503
Attn: Mr. Carl Ulvog

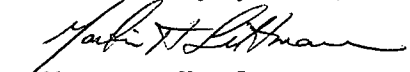


Dear Mr. Ulvog,

Enclosed is the chemical analysis from the flow test of Radium Springs 25-34 which you requested from Roy Cunniff.

If you need anything further please feel free to call me at (214) 573-8718.

Sincerely yours,


Martin H. Littmann



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

August 23, 1982

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Hunt Energy Corporation
2500 First National Bank Bldg.
Dallas, Texas 75202

Re: \$10,000 Multiple-Well Geothermal
Exploratory, Development, Injection
or Disposal Well Bond
Lamar Hunt, Principal
American Home Assurance Company,
Surety
Bond No. E-054

Gentlemen:

The Oil Conservation Division hereby approves the
above-referenced bond effective August 17, 1982.

Sincerely,

JOE D. RAMEY,
Director

dr/

cc: Carl Ulvog _ OCD
Santa Fe, New Mexico



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

February 2, 1983

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Chas. L. Dexter & Co., Inc.
6440 N. Central Expressway
Suite 505
Dallas, Texas 75206

Re: \$10,000 Multiple-Well Geothermal
Bond, Lease: NM 25556 Well 25-34
Bond No. 520 48 89

Gentlemen:

The Oil Conservation Division hereby approves
release of the above-referenced geothermal bond
effective August 19, 1982.

Sincerely,

JOE D. RAMEY,
Director

dr/

cc: Oil Conservation Division
Santa Fe - Carl Ulvog

Mr. Lamar Hunt
2500 First National Bank Bldg.
Dallas, Texas 75202

NEW MEXICO OIL CONSERVATION COMMISSION

P. O. Box 2088, Santa Fe 87501

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DISTRIBUTION	
File	1
N.M.B.M.	1
U.S.G.S.	1
Operator	1
Land Office	

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

5. Indicate Type of Lease

STATE ☐FEE ☐

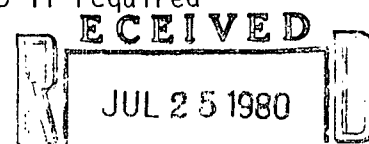
5.a State Lease No.

Federal Lease NM-25557

1a. Type of Work	Drill <input checked="" type="checkbox"/>	Deepen <input type="checkbox"/>	Plug Back <input type="checkbox"/>	7. Unit Agreement Name		
b. Type of Well	Geothermal Producer <input type="checkbox"/>	Temp Observation <input type="checkbox"/>	Low-Temp Thermal <input type="checkbox"/>	Exploratory <input type="checkbox"/>	Injection/Disposal <input type="checkbox"/>	8. Farm or Lease Name
						Radium Springs
2. Name of Operator						9. Well No.
Lamar Hunt, Geothermal Operations						25-34
3. Address of Operator						10. Field and Pool, or Wildcat
2500 First National Bank Bldg.						Wildcat
4. Location of Well						12. County
UNIT LETTER _____ LOCATED 968.37 FEET FROM THE West LINE						Dona Ana
AND 2335.13 FEET FROM THE South LINE OF SEC. 34 TWP. 20 S. RGE. 1 W. NMPM						
						19. Proposed Depth
						9,000 ft
						19A. Formation
						Unknown
						20. Rotary or C.T.
						Rotary
21. Elevations (Show whether DF, RT, etc.)		21A. Kind & Status Plug. Bond		21B. Drilling Contractor		22. Approx. Date Work will start
4,240 GR		\$10,000 #5204889		to be contracted		September 1, 1980

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
26 in.	20 in.	94 #	100 ft	per contract	
17-1/2 in.	13-3/8 in.	54.5 #	900 ft	590+	
12-1/4 in.	9-5/8 in.	40.0 #	6000 ft	1920+	
8-1/2 in.	7 in.	26.0 #	Perf. liner to TD if required		



OIL CONSERVATION DIVISION

Drilling and blowout prevention programs meet or exceed all Federal requirements for this Federal lease.

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 prevention program, if any.

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

Signed Roger L. Bowers Title Lamar Hunt Geothermal Operations Date 7/14/80

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 7/28/80
CONDITIONS OF APPROVAL, IF ANY:

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

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

Operator Lamar Hunt, Geothermal Operations		Lease Federal NM-25557		Well No. 25-34
Unit Letter	Section 34	Township T. 20 S.	Range R. 1.W.	County Dona Ana
Actual Footage Location of Well: 968.37 feet from the West line and 2335.13 feet from the South line				
Ground Level Elev. 4,240	Producing Formation Unknown	Pool NA	Dedicated Acreage: 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.

RECEIVED
JUL 25 1980
OIL CONSERVATION DIVISION
SANTA FE

CERTIFICATION

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

Name
Donna Butts

Position
Landman

Company
Hunt Energy Corp.

Date
7/23/80

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.

SEE ATTACHMENT

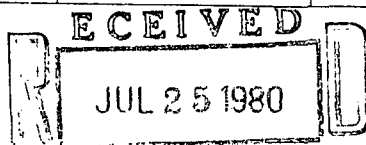
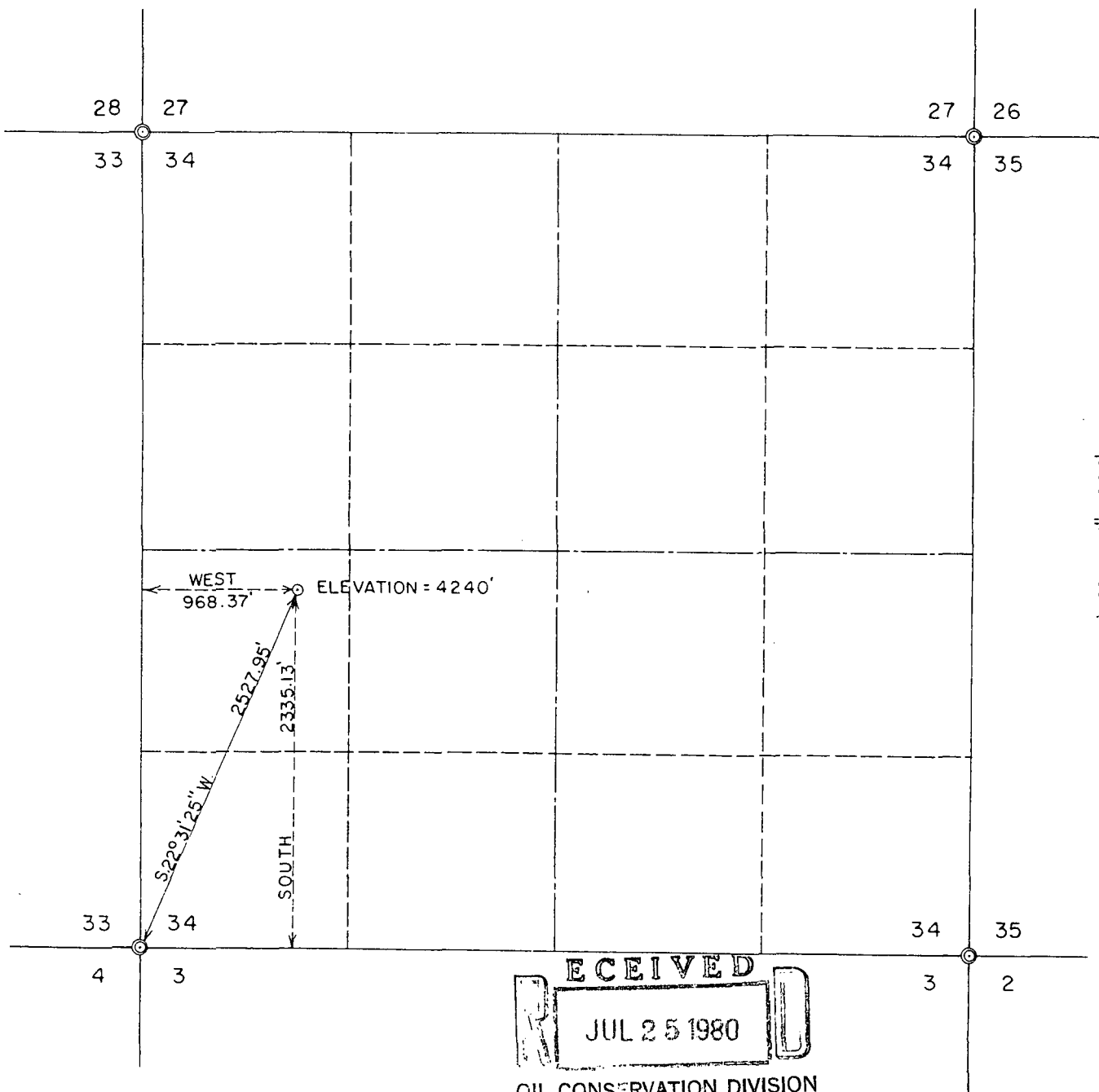
Date Surveyed
5/5/80

Registered Professional Engineer and/or Land Surveyor

Certificate No.

330 660 90 1320 1650 1980 2310 2640 2000 1500 1000 500 0

PLAT OF SURVEY SHOWING THE LOCATION OF A GEOTHERMAL WELL
 LOCATED IN SECTION 34, T.20S., R.1W., N.M.P.M. OF THE U.S.G.L.O. SURVEYS
 NORTH OF RADIUM SPRINGS, DONA ANA COUNTY, NEW MEXICO
 SCALE: 1" = 1000' MAY 5, 1980

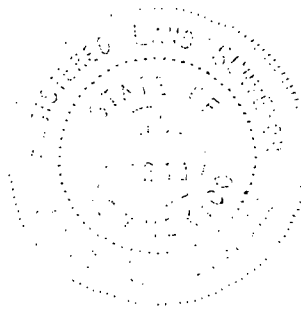


OIL CONSERVATION DIVISION

SANTA FE GEOTHERMAL OPERATIONS

Well Location

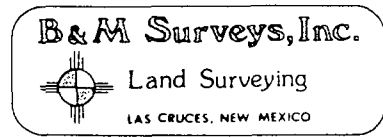
Radium Springs No. 25-34

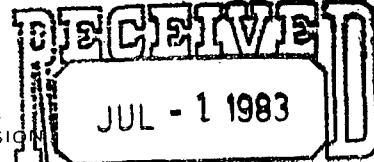


I HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR
 IN THE STATE OF NEW MEXICO AND THAT THIS PLAT WAS
 MADE BY ME OR UNDER MY SUPERVISION FROM THE NOTES
 OF AN ACTUAL FIELD SURVEY AND THAT IT IS TRUE AND
 CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

James A. Botsford

PREPARED BY:





Form G-103
Adopted 10/1/74

NO. OF COPIES RECEIVED	
DISTRIBUTION	<input checked="" type="checkbox"/>
File	
N. M. B. M.	
U. S. G. S.	
Operator	
Land Office	

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

OIL CONSERVATION DIVISION
SANTA FE

SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease
State ☐ Fee ☐

5.a State Lease No.
FED. NM-25557

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 type="checkbox"/> Low-Temp Thermal <input checked="" type="checkbox"/> Injection/Disposal <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator LAMAR HUNT	8. Farm or Lease Name RADIUM SPRINGS
3. Address of Operator 2800 Thanksgiving Tower, 1601 Elm, Dallas, TX 75201	9. Well No. 25-34 (LRG 503)
4. Location of Well Unit Letter <u>L</u> <u>968.37</u> Feet From The <u>west</u> Line and <u>2335.13</u> Feet From The <u>south</u> Line, Section <u>34</u> Township <u>20 S</u> Range <u>1 W</u> NMPM.	10. Field and Pool, or Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4240 GR	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 ☐
PULL OR ALTER CASING ☐ CHANGE PLANS ☐
OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG & ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER Report Pump Test Results ☒

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. Pursuant to the G-103 Sundry Notice, dated April 6, 1983 (approved April 8), the casing was perforated in the above referenced well, and a 3 day pump test performed.

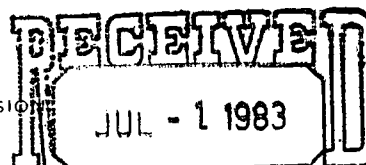
Pump Test Summary: The well was gravel packed from bridge at 6523 ft. (GL) to bottom of 9 5/8 inch casing at 6041 feet. The 9 5/8 csn was perforated as follows: 2410 to 2404 ft., 6 shots per foot; 2403 to 2397 ft., 6 spf; 2396 to 2390 ft., 6 spf; 2389 ft., 4 spf; 2388 to 2387 ft., 6 spf; 2386 ft., 2 spf. Pump test commenced on May 2, 1983 at 11:30 AM and lasted 3 days. Total producing time = 4283 minutes (71.38 hrs). Total produced volume = 1,923,000 gallons (48,076 BBL). At conclusion of test, all equipment was removed from the site and the well was shut in and locked. All produced water was allowed to percolate back into the ground and had done so within the require 96 hours. The site has been cleaned of trash and the percolation pit has been fenced off.

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

SIGNED David J. Lloyd LAMAR HUNT GEOTHERMAL OPERATIONS
David J. Lloyd TITLE DATE June 28, 1983

APPROVED BY Carl Ulvog DISTRICT SUPERVISOR DATE 7/1/83

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

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

5. Indicate Type of Lease
State <input type="checkbox"/> Fee <input type="checkbox"/>
5.a State Lease No.
FED. NM-25557

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 type="checkbox"/> Low-Temp Thermal <input checked="" type="checkbox"/> Injection/Disposal <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator LAMAR HUNT	8. Farm or Lease Name RADIUM SPRINGS
3. Address of Operator 2800 Thanksgiving Tower, 1601 Elm, Dallas, TX 75201	9. Well No. 25-34 (LRG 503)
4. Location of Well Unit Letter <u>L</u> <u>968.37</u> Feet From The <u>west</u> Line and <u>2335.13</u> Feet From The <u>south</u> Line, Section <u>34</u> Township <u>20 S</u> Range <u>1 W</u> NMPM.	10. Field and Pool, or Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4240 GR	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 type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>		COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG & ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER <input type="checkbox"/>		OTHER <u>Report Pump Test Results</u>	

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. Pursuant to the G-103 Sundry Notice, dated April 6, 1983 (approved April 8), the casing was perforated in the above referenced well, and a 3 day pump test performed.

Pump Test Summary: The well was gravel packed from bridge at 6523 ft. (GL) to bottom of 9 5/8 inch casing at 6041 feet. The 9 5/8 csn was perforated as follows: 2410 to 2404 ft., 6 shots per foot; 2403 to 2397 ft., 6 spf; 2396 to 2390 ft., 6 spf; 2389 ft., 4 spf; 2388 to 2387 ft., 6 spf; 2386 ft., 2 spf. Pump test commenced on May 2, 1983 at 11:30 AM and lasted 3 days. Total producing time = 4283 minutes (71.38 hrs). Total produced volume = 1,923,000 gallons (48,076 BBL). At conclusion of test, all equipment was removed from the site and the well was shut in and locked. All produced water was allowed to percolate back into the ground and had done so within the require 96 hours. The site has been cleaned of trash and the percolation pit has been fenced off.

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

SIGNED <u>David J. Lloyd</u>	TITLE <u>LAMAR HUNT GEOTHERMAL OPERATIONS</u>	DATE <u>June 28, 1983</u>
APPROVED BY <u>Carl Ulvog</u>	TITLE <u>DISTRICT SUPERVISOR</u>	DATE <u>7-1-83</u>

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

NEW MEXICO OIL CONSERVATION COMMISSION

Box 2088, Santa Fe 87501

APR 08 1981

FEB 12 1981

OIL CON

SUNDRY NOTICES AND REPORTS

ON
GEOTHERMAL RESOURCES WELLS

OIL CONSERVATION DIVISION

SANTA FE

5. Indicate Type of Lease

State ☐Fee ☐

5.a State Lease No.

Federal NM-25557

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"/> Low-Temp Thermal <input type="checkbox"/>	Temp. Observation <input checked="" type="checkbox"/> Injection/Disposal <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator Lamar Hunt		8. Farm or Lease Name Radium Springs
3. Address of Operator 2500 1st Nat'l Bank Dallas, TX 75202		9. Well No. 25
4. Location of Well Unit Letter <u>L</u> <u>968.37</u> Feet From The <u>West</u> Line and <u>2335.13</u> Feet From The <u>South</u> Line, Section <u>34</u> Township <u>20 S.</u> Range <u>1 W.</u> NMPM.		10. Field and Pool, or Wildcat Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4240 ft. GR		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 ☒
PULL OR ALTER CASING ☐ CHANGE PLANS ☐
OTHER ☐

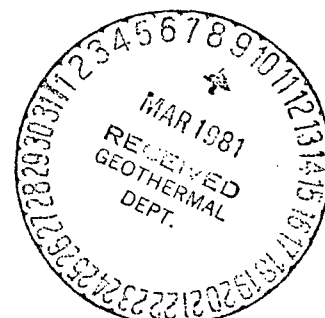
SUBSEQUENT REPORT OF:

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.

Suspension of operations, well to be used for observation and/or possibly reinjection, arrangements have been made to fence in the location

20" conductor 100'
13 3/8" csg 1667'
9 5/8" csg 6063'
TD 8000'



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

SIGNED G. S. Bumgarner Jr. TITLE Lamar Hunt DATE 2/6/81
Geothermal Operations

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 2/18/81

CONDITIONS OF APPROVAL, IF ANY

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

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

Form G-102
Adopted 10/17
APR 08 1982
OIL CONSERVATION DIVISION

Operator Lamar Hunt, Geothermal Operations		Lease Federal NM-25557		Well No. 25-34	
Unit Letter	Section 34	Township T. 20 S.	Range R. 1 W.	County Dona Ana	
Actual Footage Location of Well: 968.37 feet from the West line and 2335.13 feet from the South line					
Ground Level Elev. 4,240	Producing Formation Unknown		Pool NA		Dedicated Acreage: 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.

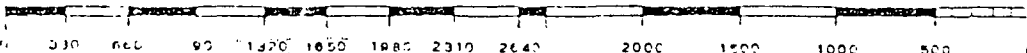
Name Donna Butts
Position Landman
Company Hunt Energy Corp.
Date 7/23/80

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.

SEE ATTACHMENT

Date Surveyed 5/5/80
Registered Professional Engineer and/or Land Surveyor

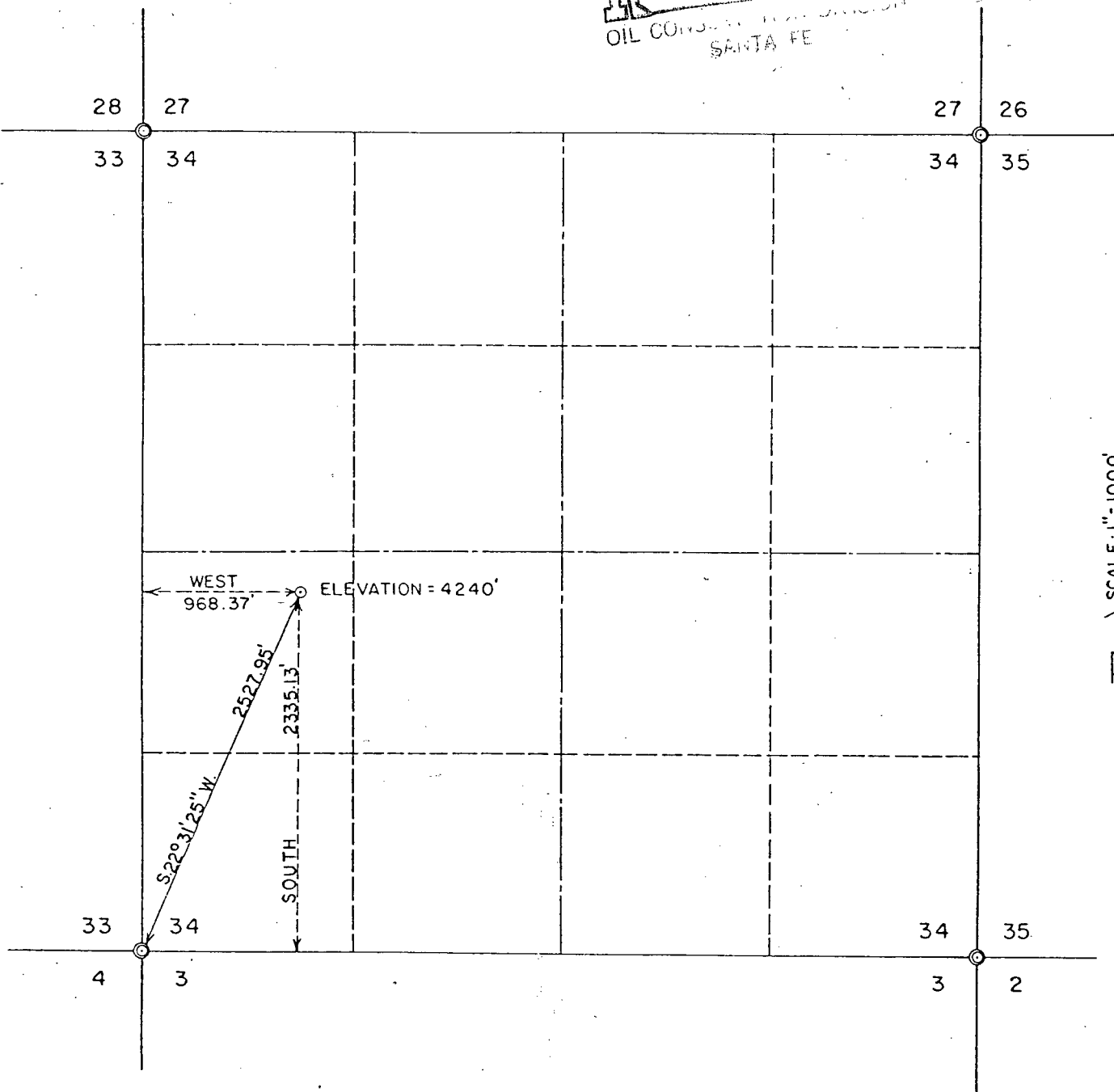
Certificate No.



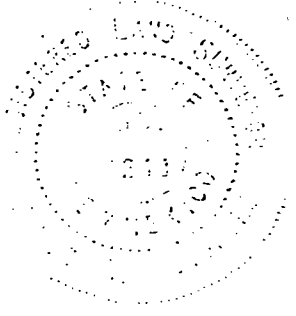
PLAT OF SURVEY SHOWING THE LOCATION OF A GEOTHERMAL WELL
 LOCATED IN SECTION 34, T.29S., R.1W., N.M.P.M. OF THE U.S.G.L.O. SURVEYS
 NORTH OF RADIUM SPRINGS, DONA ANA COUNTY, NEW MEXICO
 SCALE: 1" = 1000'

RECEIVED
 APR 08 1982
 OIL CONSERVATION DISTRICT
 SANTA FE

MAY 5, 1980



HUNT GEOTHERMAL OPERATIONS
 Well Location
 Radium Springs No. 25-34



I HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR
 IN THE STATE OF NEW MEXICO AND THAT THIS PLAT WAS
 MADE BY ME OR UNDER MY SUPERVISION FROM THE NOTES
 OF AN ACTUAL FIELD SURVEY AND THAT IT IS TRUE AND
 CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

James A. Botsford

PREPARED BY:

B & M Surveys, Inc.
 Land Surveying
 LAS CRUCES, NEW MEXICO



APR 08 1981
STATE OF NEW MEXICO

OIL STATE ENGINEER OFFICE
SANTA DEMING



S. E. REYNOLDS
STATE ENGINEER

March 18, 1981

ADDRESS CORRESPONDENCE TO:
P. O. BOX 844
DEMING, N. M. 88030

FILE: LRG-503-Exploratory

Mr. Lamar Hunt
Hunt Energy Corporation
2500 First National Bank Building
Dallas, Texas 75202

Dear Sir:

Enclosed is your copy of the well record for
your Exploratory Geothermal Test Well No. LRG-503-
Exploratory, which has been accepted for filing.

Yours truly,

L. T. Putnam
Supervisor, District III

LTP:sfs
Encl: Well Record
cc: State Engineer

STATE ENGINEER OFFICE
WELL RECORD

Revised June 1972

Section 1. GENERAL INFORMATION

(A) Owner of well Lamar Hunt
Street or Post Office Address 2500 First National Bank Building
City and State Dallas, Texas 75202

OIL CONSERVATION DISTRICT NO. 25-34
Owner's Well No. 25-34

Well was drilled under Permit No. LRG-503-Exploratory and is located in the:

- a. NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 34 Township 20 S. Range 1 W. N.M.P.M.
b. Tract No. _____ of Map No. _____ of the _____
c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.
d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in
the _____ Grant.

(B) Drilling Contractor Montgomery Drilling Company License No. WD 907
Address P.O. Box 2508, Bakersfield, California 93303

Drilling Began 11-3-80 Completed 2-4-81 Type tools Rotary Size of hole 17 1/2 in.
12 1/4 in.
8 3/4 in.

Elevation of land surface or _____ at well is 4240 ft. Total depth of well 8000 ft.

Completed well is ☐ shallow ☐ artesian. Depth to water upon completion of well _____ ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
2400'	2415'	15	Fault Zone	Unknown

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
20"		8 Kd.	Surface	100'	100'	Open Shoe		None
13 3/8	54.50	Buff.	Surface	1665	1665	Guide Shoe		None
9 5/8	40.00	Buff.	Surface	6063	6063	Baffle Guide Shoe		None

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
Surface	100'	24"		160 ft ³	From inside - out
Surface	1665'	17 1/2"		1414 ft ³	Haliburton Pump Truck
Surface	6063'	12 1/4"		2500 ft ³	Haliburton Pump Truck

Section 5. PLUGGING RECORD

Plugging Contractor _____
Address _____
Plugging Method _____
Date Well Plugged _____
Plugging approved by: _____

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received March 11, 1982

Quad _____ FWL _____ FSL _____

File No. LRG-503-Exploratory Use Exploratory Location No. 20.1.34.3121

*this well
25-74*

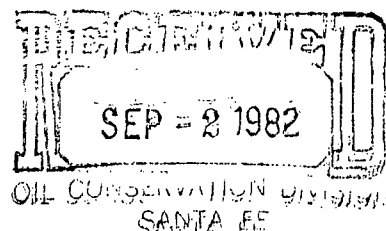
DST 1/18/81 from 2450

To: G. S. Bumgarner, Geologist; Hunt Energy Corp.
 From: Andrew Lee Bristol, Analytical Consultant
 Subject: Test samples taken February 2 & 3, 1981 at first hole Radium Springs, NM

Sample			6-9 pH	mmhos/cm E.C.	Na	K	Ca	mg/L Mg	250 Cl	CO ₃	HCO ₃
1	2/2/81	1:45 PM	9.14	3.47	829.9	56.7	14.6	.6	840.9	48.6	232.1
2	2/2/81	5:00 PM	9.30	3.38	792.2	55.9	14.6	.8	789.9	67.8	206.4
3	2/2/81	8:15 PM	9.21	3.31	769.7	54.7	11.2	1.0	789.9	60.0	237.0
4	2/2/81	11:30 PM	9.13	3.10	703.5	52.4	6.8	1.0	683.5	57.0	234.5
5	2/3/81	2:00 AM	9.16	3.09	689.0	52.4	6.0	1.1	626.8	64.8	218.6
6	2/3/81	5:30 AM	9.15	3.02	680.5	52.4	5.2	1.2	591.4	72.0	225.4

Sample	600 SO ₄	10.0 NO ₃ -N	NO ₂ -N	NH ₄ -N	.75 B	mg/L SiO ₂	1.6 F	1.0 Fe	.2 Mn	0.1 As	.05 Pb
1	437.5	56.2	66.5	.71	.71	56.0	5.70	9.94	.77	.007	<.01
2	415.0	24.6	64.0	.62	.68	57.5	6.00	7.07	.62	.006	<.01
3	400.0	9.2	59.0	.70	.66	58.0	5.85	6.92	.77	.006	<.01
4	392.5	6.7	41.0	.68	.65	56.5	5.70	11.30	.89	.007	<.01
5	375.0	9.2	34.0	.57	.65	59.0	5.65	5.71	.58	.007	<.01
6	377.5	3.2	32.0	.55	.65	61.0	5.70	4.98	.50	.007	<.01

	.002 Sb	10.0 mg/L Hg	10.0 mg/L Zn	Sr	1000 TDS	180/160 X100
1	<.5	<.0002	.06	.39	2302	.188 ± .019
2	<.5	<.0002	.06	.33	2174	.201 ± .002
3	<.5	<.0002	.04	.28	2110	.199 ± .002
4	<.5	<.0002	.04	.23	1970	.208 ± .006
5	<.5	<.0002	.03	.23	1970	.205 ± .007
6	<.5	<.0002	.02	.21	1920	.201 ± .011
						.204 ± .007 for tap H ₂ O



static w/L this well 270'

Derrick Rig

Revised

Nov 1981

DCM - Geology

K: E T 2 KE PL 1

BLD D 137

4600

K: KSK: LA

89502



Physical Science Laboratory

BOX 3548, LAS CRUCES, NEW MEXICO 88003-3548
AREA (505) 522-9100 TWX 910-983-0541

August 4, 1982

Mr. Carl Ulvog
New Mexico Oil Conservation Division
P.O. Box 2086
Santa Fe, NM 87503

Dear Mr. Ulvog:

Enclosed please find an original and four copies of forms G-101 and G-102 for our planned new Geothermal disposal well, GD-2.

Also enclosed is a copy of the Plugging Bond. Please note that this bond is a multiple bond, also covering our planned deep gradient well. When we have picked a precise location for this new gradient well, forms G-101 and G-102 will be submitted.

Also please note that the wells contain an identifying number different from our current numbering scheme. After the State Engineer has assigned a Lower Rio Grande (LRG) designation for these wells, I will advise you of the amended numbering.

Sincerely,

A handwritten signature in cursive script, reading 'Roy A. Cunniff'.

Roy A. Cunniff

RAC/bj1

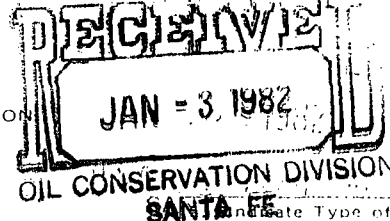
Enclosure

PLANNED MODIFICATION TO WELL 25-34

We propose the following well modifications for the purpose of conducting an expanded flow test:

1. Make ready the location by installing four rig anchors, repairing two existing reserve pits, and excavating a third pit.
2. Reinstalling the 13 3/8" and 9 5/8" wellheads with a packoff flange on the 9 5/8 x 13 3/8 annulus.
3. Gravel pack the open hole and 3265' of 9 5/8". Spot a cement plug on top of the gravel pack from 2800' to 2650'.
4. Perforate and squeeze the 9 5/8" casing at 2650' to ensure a seal from any deeper zones. If squeeze pressures do not indicate an adequate job, cement will be drilled out, a CBL run and resqueezed if needed.
5. Pressure test cement plugs to 1000 psi for 15 minutes.
6. Perforate and squeeze the 9 5/8" casing at 1660' to isolate the zones of interest. Test casing to 1000 psi for 15 minutes.
7. Back off and retrieve 1450' of 9 5/8" casing.
8. Perforate the primary zone at 2420' to 2390'.
9. Install a lineshaft pump, flowlines, and monitoring equipment to run a productivity-potential flow test.

NOTE: BOPE will be installed during steps 3,4,5 and 6. It can be determined during step 6 if BOPE will be needed during the perforation of the proposed test interval, and provisions are made for using such equipment if deemed necessary.

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

NO. OF COPIES RECEIVED		
DISTRIBUTION		
File		
N.M.B.M.		
J.S.G.S.		
Operator		
and Office		

APPLICATION FOR PERMIT TO DRILL, DEEPEN,
OR PLUG BACK---GEOTHERMAL RESOURCES WELLDate Type of Lease
STATE ☐ Federal ☐ FEE ☐5.a State Lease No.
FED. NM-25557

7. Unit Agreement Name

8. Farm or Lease Name
Radium Springs9. Well No.
25

10. Field and Pool, or Wildcat

12. County
Dona Anaa. Type of Work Drill ☐ Deepen ☐ Plug Back ☒b. Type of Well Geothermal Producer ☐ Temp Observation ☐
Low-Temp Thermal ☒ Injection/Disposal ☐c. Name of Operator
LAMAR HUNT GEOTHERMALd. Address of Operator
2800 Thanksgiving Tower, Dallas, Texas 75201e. Location of Well UNIT LETTER L LOCATED 968.37 FEET FROM THE West LINE
AND 2335.13 FEET FROM THE South LINE OF SEC. 34 TWP. 20 S. RGE. 1 W. NMPM

19. Proposed Depth

n/a

19A. Formation

n/a

20. Rotary or C.T.

n/a

f. Elevations (Show whether DF, RT, etc.)

4,240 GR

21A. Kind & Status Plug. Bond

#5204889

21B. Drilling Contractor

to be contracted

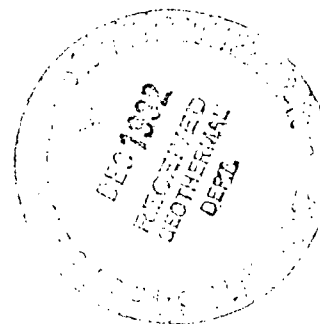
22. Approx. Date Work will start

December 1, 1982

PROPOSED CASING AND CEMENT PROGRAM

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

(See Attachment)



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 Roger L. Bonner Title LAMAR HUNT GEOTHERMAL Date December 1, 1982

(This space for State Use)

APPROVED BY

Carl Ulvog

TITLE

DISTRICT SUPERVISOR

DATE

12-10-82

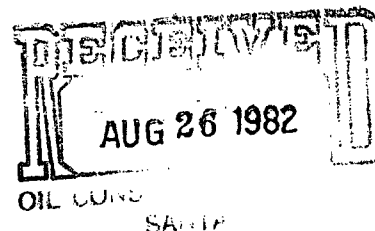
CONDITIONS OF APPROVAL, IF ANY:

LAMAR HUNT
2500 FIRST NATIONAL BANK BUILDING
DALLAS, TEXAS 75202

August 24, 1982

State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Attention: Carl Ulvog



Dear Mr. Ulvog:

Enclosed are copies of a Sundry Notice for a pump test on our geothermal well 25-34 (LRG-503) at Radium Springs.

The test will be conducted by the Physical Science Laboratory, New Mexico State University. Roy Cunniff will be in charge. We hope to start the test by October 1, 1982.

If you need additional information, please contact me or Roy Cunniff.

Yours truly,

LAMAR HUNT, GEOTHERMAL OPERATIONS

A handwritten signature in cursive script, reading "Roger L. Bowers".

Roger L. Bowers

encl.

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

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

RECEIVED

FEB 12 1981

Form G-103
Adopted 10/1/74

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

OIL CONSERVATION DIVISION
SANTA FE

5. Indicate Type of Lease State <input type="checkbox"/> Fee <input type="checkbox"/>
5.a State Lease No. Federal NM-25557

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 Lamar Hunt	8. Farm or Lease Name Radium Springs
3. Address of Operator 2500 1st Nat'l Bank Dallas, TX 75202	9. Well No. 25
4. Location of Well Unit Letter <u>L</u> <u>968.37</u> Feet From The <u>West</u> Line and <u>2335.13</u> Feet From The <u>South</u> Line, Section <u>34</u> Township <u>20 S.</u> Range <u>1 W.</u> NMPM.	10. Field and Pool, or Wildcat Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4240 ft. GR	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 type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input checked="" type="checkbox"/>		COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG & ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER <input type="checkbox"/>		OTHER <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.

Suspension of operations, well to be used for observation and/or possibly reinjection, arrangements have been made to fence in the location

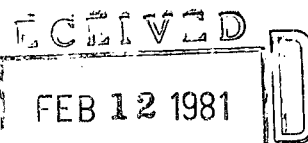
20" conductor 100'
13 3/8" csg 1667'
9 5/8" csg 6063'
TD 8000'

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

SIGNED G. S. Bumgarner Jr. TITLE Lamar Hunt DATE 2/6/81
Geothermal Operations

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 2/18/81

CONDITIONS OF APPROVAL, IF ANY:

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

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

SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLSOIL CONSERVATION DIVISION
SANTA FE

5. Indicate Type of Lease

State ☐ Fee ☐

5.a State Lease No.

Federal NM-25557

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"/> Low-Temp Thermal <input type="checkbox"/>	Temp. Observation <input checked="" type="checkbox"/> Injection/Disposal <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator Lamar Hunt		8. Farm or Lease Name Radium Springs
3. Address of Operator 2500 1st Nat'l Bank Dallas, TX 75202		9. Well No. 25
4. Location of Well Unit Letter <u>L</u> <u>968.37</u> Feet From The <u>West</u> Line and <u>2335.13</u> Feet From The <u>South</u> Line, Section <u>34</u> Township <u>20 S.</u> Range <u>1 W.</u> NMPM.		10. Field and Pool, or Wildcat Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4240 ft. GR		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 ☒
PULL OR ALTER CASING ☐ CHANGE PLANS ☐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.

Suspension of operations, well to be used for observation and/or possibly reinjection, arrangements have been made to fence in the location

20" conductor 100'
13 3/8" csg 1667'
9 5/8" csg 6063'
TD 8000'

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

SIGNED G. S. Bumgarner Jr. TITLE Lamar Hunt DATE 2/6/81
Geothermal OperationsAPPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 2/18/81

CONDITIONS OF APPROVAL, IF ANY

80 DEC 17 AM 8 37

DRILL A TEST WELL
APPLICATION TO ~~APPROPRIATE UNDERGROUND WATERS~~
IN ACCORDANCE WITH SECTION 75-11, NEW MEXICO STATUTES

87382 D \$1.00

STATE ENGINEER OFFICE
DISTRICT III
DEMING, N. MEX.

Address of Applicant:

File No. LRG-503-Exploratory

HUNT ENERGY CORPORATION

2500 First National Bk. Bldg.

Dallas, Texas 75202

2. Describe well location under one of the following subheadings:

a. NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Sec. 34 Twp. 20S Rge. 1W N. M. P. M., in
Dona Ana County.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.

d. X = _____ feet, Y = _____ feet, N. M. Coordinate System _____ Zone
in the _____ Grant.

e. Give street address or route and box No. of property upon which well is to be located, or location by direction and
distance from known landmarks _____

3. Approximate depth (if known) 9000 feet; outside diameter of casing 9 5/8 inches.

Name of driller (if known) Carl Ratliff; Montgomery Drilling Company

4. Use of water (check appropriate box or boxes):

- ☐ Household, non-commercial trees, lawn and garden not to exceed 1 acre.
- ☐ Livestock watering.
- ☐ Drinking and sanitary purposes and the irrigation of non-commercial trees, shrubs and lawns in conjunction with
a commercial operation.
- ☐ Prospecting, mining or drilling operations to discover or develop natural resources.
- ☐ Construction of public works, highways and roads.
- X ☒ Drill and test a geothermal well.
- If any of the last three were marked, give name and nature of business under Remarks. (Item 5)

5. Remarks: _____

I, B. W. Berthelot, affirm that the foregoing statements are true to the best of my knowledge
and belief and that development shall not commence until approval of the permit has been obtained.

HUNT ENERGY CORPORATION, Applicant

By: B. W. Berthelot

Date: December 12, 1980

ACTION OF STATE ENGINEER

This application is approved for the use indicated, subject to all general conditions and to the specific conditions numbered
9 through 15 on the attached sheet. This permit will automatically expire unless this well is
drilled or driven and the well record filed on or before December 30, 1981.

S. E. Reynolds, State Engineer

By: L. T. Putnam
Supervisor, District III

Date: December 17, 1980

File No. LRG-503-Exploratory

GENERAL CONDITIONS OF APPROVAL

- A. The maximum amount of water that may be appropriated under this permit is 3 acre feet in any calendar year.
- B. The well shall be drilled only by a driller licensed in the State of New Mexico in accordance with Section 75-11-13 New Mexico Statutes Annotated. A licensed driller shall not be required for the construction of a driven well; provided, that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 75-11-13).
- C. Driller's log must be filed in the office of the State Engineer within 10 days after the well is drilled or driven. Failure to file the log within that time shall result in automatic cancellation of the permit. Log forms will be provided by the State Engineer upon request.
- D. The casing shall not exceed 7 inches outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.
- E. If the well under this permit is used at any time to serve more than one household, livestock in a commercial feed lot operation, or any other commercial purpose, the permittee shall comply with Specific Condition of Approval number 5(b).
- F. In the event this well is combined with other wells permitted under Section 75-11-1 New Mexico Statutes Annotated, the total outdoor use shall not exceed the irrigation of one acre of non-commercial trees, lawn, and garden, or the equivalent outside consumptive use, and the total appropriation for household and outdoor use from the entire water distribution system shall not exceed 3 acre feet per annum.

SPECIFIC CONDITIONS OF APPROVAL

(Applicable only when so indicated on the other side of this form.)

- 1. Depth of the well shall not exceed the thickness of the (a) the valley fill or (b) Ogallala formation.
- 2. The well shall be constructed to artesian well specifications and the State Engineer Office shall be notified before casing is landed or cemented.
- 3. Appropriation and use of water under this permit shall not exceed a period of one year from the date of approval.
- 4. Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.
- 5. A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the State Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water and pumping records shall be submitted to the District Supervisor (a) for each calendar month on or before the 30th day of the following month (b) on or before the 10th of January, April, July and October of each year for the three preceding calendar months (c) for each calendar year on or before the 30th day of January of the following year.
- 6. The well shall be plugged upon completion of the permitted use and a plugging report shall be filed in the office of the State Engineer within 10 days.
- 7. Final approval for the use of the well shall be dependent upon a leakage test made by the State Engineer Office.
- 8. Use shall be limited strictly to household and/or drinking and sanitary purposes; water shall be conveyed from the well to the place of use in closed conduit and the effluent returned to the underground so that it will not appear on the surface. No irrigation of lawns, garden, trees or use in any pool or pond is authorized under this permit.

INSTRUCTIONS

The application shall be made in the name of the actual user of the well for the purpose specified in the application.

The application shall be executed in triplicate and forwarded with a \$1.00 filing fee to the appropriate office of the State Engineer.

A separate application must be filed for each well to be drilled or used.

If well to be used is an existing well, an explanation (and file number, if possible) should be given under Remarks. (Item 5.)

Applications for appropriation, well logs and request for information in the following basins should be addressed to the State Engineer at the office indicated;

Bluewater, Estancia, Rio Grande, and Sandia Basins

District No. 1, 505 Marquette NW, Room 1023, Albuquerque, New Mexico 87101-

Capitan, Carlsbad, Fort Sumner, Hondo, Jal, Lea, Penasco, Portales, Roswell, and Upper Pecos Basins

District No. 2, Box 1717, Roswell, New Mexico 88201

Animas, Gila-San Francisco, Hot Springs, Las Animas Creek, Lordsburg, Mimbres, Nutt-Hockett, Playas, San Simon, and Virden Valley Basins

District No. 3, Box 844, Deming, New Mexico 88030

Canadian River Basin

State Engineer Office, State Capitol, Bataan Memorial Bldg., Santa Fe, New Mexico 87501

ATTACHED TO AND FORMING PART OF EXPLORATORY

WELL PERMIT NUMBER LRG-503-Exploratory

FILED DECEMBER 17, 1980.

SPECIFIC CONDITIONS OF APPROVAL NO. 9 THROUGH 15 ARE AS FOLLOWS:

9. Well shall be drilled only by a drilling contractor licensed by the State Engineer of New Mexico.
10. The State Engineer shall be given 3 days advance notice in writing of the initiation of any flow test utilizing the well.
11. Personnel from the State Engineer shall have access to the well site at all times during the flow test.
12. No water shall be diverted from the well except during the testing operation designated to develop the geothermal resource and no beneficial use of the water pumped during the test shall be made.
13. Diversion of water shall be measured by a totalizing meter, or meters, of a type and at a location(s) approved by and installed in a manner acceptable to the State Engineer. Records of such diversion and the amount of water, if any, reinjected into the geothermal reservoir shall be submitted to the State Engineer no later than 40 days from the completion of the test but in no event later than December 30, 1981.
14. Testing shall not be conducted for more than 90 days without the written permission of the State Engineer.
15. Well shall be plugged or capped on or before December 30, 1981, unless a permit to use water from the well is obtained from the State Engineer.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☐

OTHER

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Lamar Hunt, Geothermal Operations

3. ADDRESS OF OPERATOR

2500 First National Bank Bldg. Dallas, TX 75202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)

At surface

968.37 fwl, 2335.13 fsl, Sec. 34
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

968.37

16. NO. OF ACRES IN LEASE

2560.00

17. NO. OF ACRES ASSIGNED
TO THIS WELL

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

9,000 ft

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

4,240 GR

22. APPROX. DATE WORK WILL START*

September 1, 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT

See attached Drilling Program

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. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Roger L. Bowers

TITLE

Lamar Hunt
Geothermal Operations

DATE

7/14/80

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

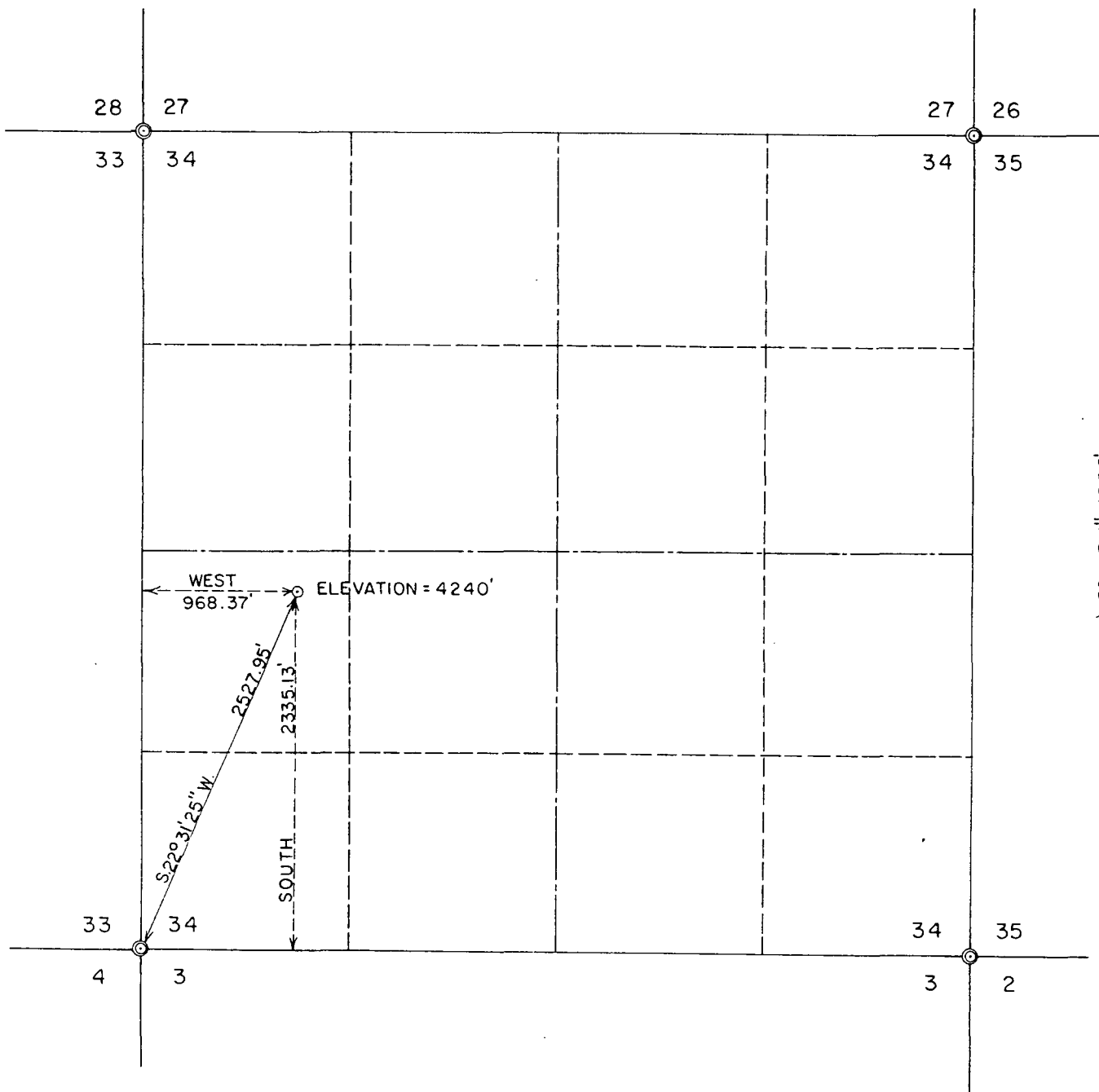
APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

PLAT OF SURVEY SHOWING THE LOCATION OF A GEOTHERMAL WELL
 LOCATED IN SECTION 34, T.20S., R.1W., N.M.P.M. OF THE U.S.G.L.O. SURVEYS
 NORTH OF RADIUM SPRINGS, DONA ANA COUNTY, NEW MEXICO.
 SCALE: 1" = 1000' MAY 5, 1980



HUNT GEOTHERMAL OPERATIONS
 Well Location

Radium Springs No. 25-34

I HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR
 IN THE STATE OF NEW MEXICO AND THAT THIS PLAT WAS
 MADE BY ME OR UNDER MY SUPERVISION FROM THE NOTES
 OF AN ACTUAL FIELD SURVEY AND THAT IT IS TRUE AND
 CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

James A. Bohlen

PREPARED BY:

B & M Surveys, Inc.
 Land Surveying
 LAS CRUCES, NEW MEXICO

R 1 W

NEW

MEXICO

27

26

ANIMAL

25-34

34

35

33

2

Radium
Springs

BM

Windmill

R 1 W

Scale

1 mile

Radium Springs Area
Dona Ana Co., New Mexico

0

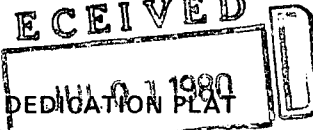
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GEOHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT



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

Operator Lamar Hunt		Lease NM-25556		OIL CONSERVATION DIVISION SANTA FE		Well No. 25-34
Unit Letter	Section 34	Township 20S	Range 1W	County Dona Ana		

Actual Footage Location of Well:

2335.13 feet from the **South** line and **968.37** feet from the **West** line

Ground Level Elev. 4240'	Producing Formation	Pool	Dedicated Acreage: Acres
------------------------------------	---------------------	------	---------------------------------

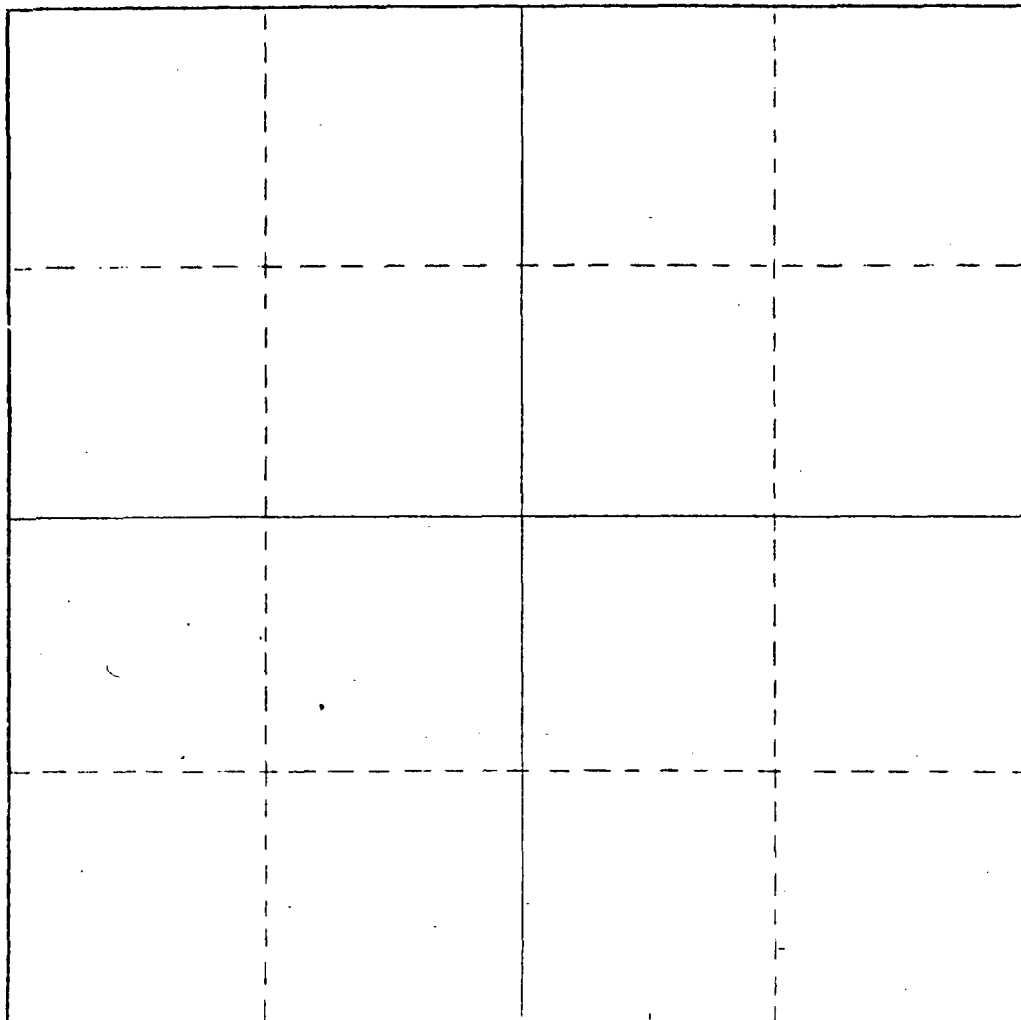
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is 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.

See Attachment



CERTIFICATION

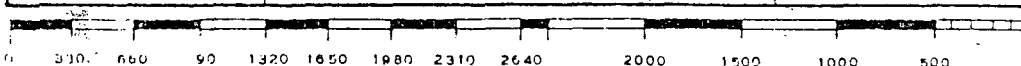
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name Donna Butts
Position Landman
Company Hunt Energy Corporation
Date 06-20-80

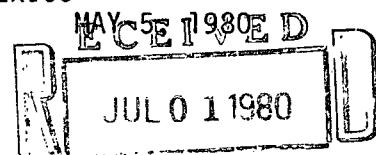
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
Registered Professional Engineer and/or Land Surveyor

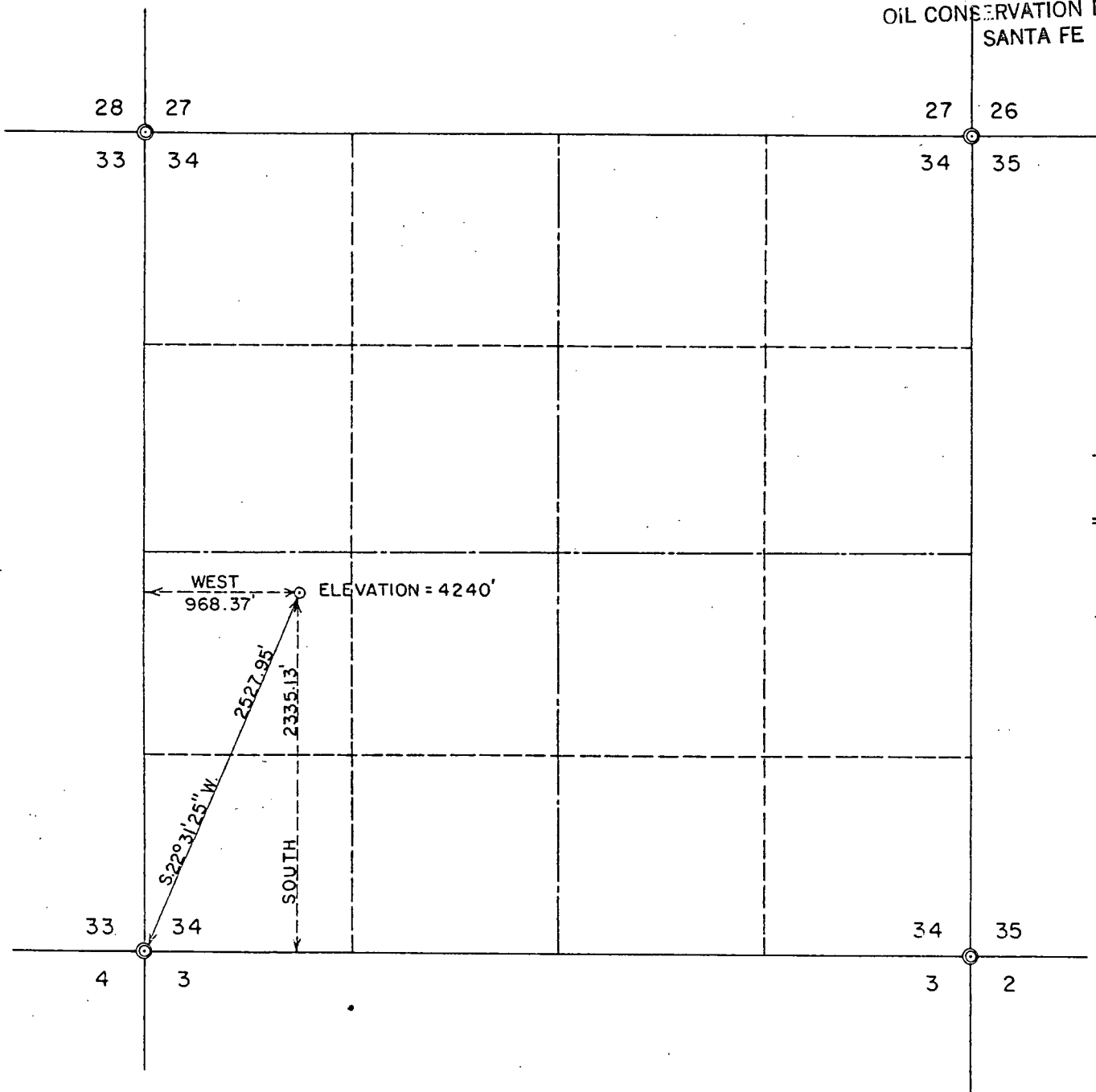
Certificate No.



PLAT OF SURVEY SHOWING THE LOCATION OF A GEOTHERMAL WELL
LOCATED IN SECTION 34, T.20S., R.1W., N.M.P.M. OF THE U.S.G.L.O. SURVEYS
NORTH OF RADIUM SPRINGS, DONA ANA COUNTY, NEW MEXICO
SCALE: 1" = 1000'



OIL CONSERVATION DIVISION
SANTA FE



HUNT GEOTHERMAL OPERATIONS
Well Location

Radium Springs No. 25-34

I HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR
IN THE STATE OF NEW MEXICO AND THAT THIS PLAT WAS
MADE BY ME OR UNDER MY SUPERVISION FROM THE NOTES
OF AN ACTUAL FIELD SURVEY AND THAT IT IS TRUE AND
CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

James A. Bohner

PREPARED BY:

B&M Surveys, Inc.
Land Surveying
LAS CRUCES, NEW MEXICO



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

June 27, 1980

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Querbes & Nelson
P. O. Box 5
Shreveport, Louisiana 71161

Re: \$10,000 Multiple-Well Geothermal
Bond, Lamar Hunt, Principal
American Insurance Company, Surety
Lease: NM 25556 Well 25-34
Sec. 34, T-20-S, R-1-W,
Bond No. 520 48 89

Gentlemen:

The Oil Conservation Division hereby approves the
above-referenced geothermal bond effective June 20, 1980.

Sincerely,

JOE D. RAMEY,
Director

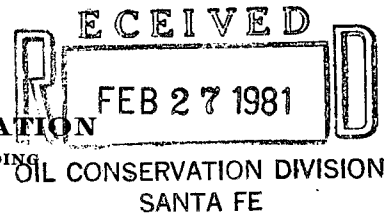
JDR/dr

cc: ✓ Carl Ulvog - Oil
Conservation Division
Santa Fe

Lamar Hunt
2500 First National Bank Bldg.
Dallas, Texas 75202

HUNT ENERGY CORPORATION

2500 FIRST NATIONAL BANK BUILDING
DALLAS, TEXAS 75202



February 23, 1981

Mr. Carl Ulvog
New Mexico State Oil & Gas Commission
Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87503

Dear Mr. Ulvog:

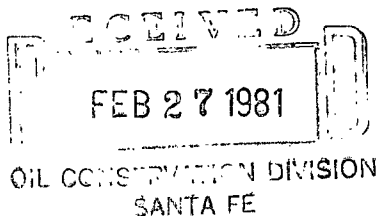
Please find enclosed the results of the New Mexico
State University testing of the spill at Radium Springs
25-34.

Call us if you have any questions or comments.

Sincerely,

A handwritten signature in cursive script, appearing to read "G. S. Bumgarner, Jr.".

G. S. Bumgarner, Jr.
Geologist



dh
Enclosure

REPORT OF SPILL

Lamar Hunt, Geothermal Operations
Geothermal Wildcat
Radium Springs 25-34 (APD #0118)
Dona Ana Co., New Mexico

On December 21, 1980 at approximately 3:30 pm, an embankment of a drainage ditch was breached by drilling fluids resulting in a spill of an estimated 350 to 500 barrels of fluid. The fluid ran westward for approximately one half mile down the natural drainage into an arroyo and continued southwesterly down the arroyo toward the Rio Grande (see map). The fluid went under a railroad trestle but was blocked from entering the Rio Grande by a natural embankment of the river.

Drilling was stopped immediately and repair work was begun. A tractor was called out to build up the drainage ditch bank and as an extra preventative measure, a sump and dam were constructed along the entire west side of the location. By the time damage could be surveyed and agencies notified, all fluid had soaked into the sandy arroyo.

The drilling fluid lost was primarily water and soap. Some formation water may have been included as evidenced by CO₂ concentrations during drilling just before the spill. No toxic materials were used in the drilling fluid system. A sample of the water supply had been tested previously by New Mexico State University and was found to be satisfactory for livestock use.

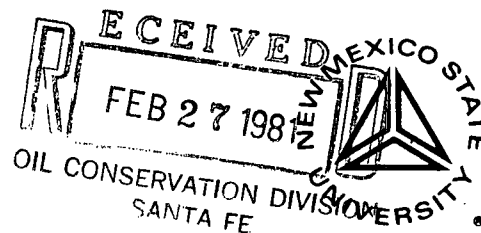
After the spill, samples of wet sand were taken approximately ¼ mile west of the wellsite and approximately 100 yards north-east of the railroad trestle. Water samples were also taken from the Rio Grande at points just upstream and 100 yards downstream of the projected point of fluid entry. All samples have been taken to New Mexico State University to be analyzed.

Normal drilling operations resumed after repair and clean-up work was completed.

COLLEGE OF AGRICULTURE AND HOME ECONOMICS

DEPARTMENT OF AGRONOMY
Box 3Q/Las Cruces, New Mexico 88003
Telephone (505) 646-3405

February 18, 1981



Hunt Energy Corp.
2500 1st Nat'l. Bank Bldg.
Dallas, Texas 75202

Data for first sampling at well No. 1-Radium Springs and spill samples

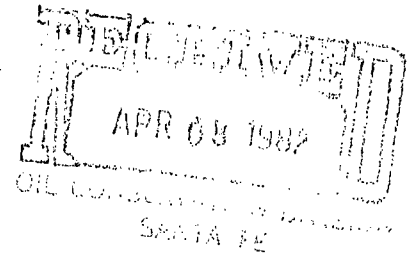
Spill Samples-----

Sample	mg/L								
	Pb	Sb	Zn	Cu	Ni	Ba	Mn	Cr	Cd
Drilling Fluid	<.01	<.5	<.02	<.10	<.05	<.4	<.05	<.05	<.005
Bank of Rio Grande	<.01	<.5	.04	<.10	<.05	<.4	2.41	<.05	<.005
Rio Grande 100 yds	<.01	<.5	<.02	<.10	<.05	<.4	<.05	<.05	<.005

mg/Kg									
1/4 mi. down wash	.6	<10	21.2	2.8	<1.0	55.0	164.6	5.2	.20
100 yds. up creek from river	1.0	<10	23.6	6.4	3.0	125.0	201.2	6.0	.24



HUNT ENERGY CORPORATION
2500 FIRST NATIONAL BANK BUILDING
DALLAS, TEXAS 75202



Telephone (214) 748-1300

April 6, 1982

New Mexico Oil Conservation Commission
P.O. Box 2088
SANTE FE, NEW MEXICO 87501

ATTENTION: CARL ULVOG

Dear Mr. Ulvog:

re: RADIUM SPRINGS - WELL No. 22

Enclosed are Forms G-103 and G-106 for the abandonment
of Well 22.

Also, for your files are copies of reports for Wells 25
and 53. These two wells are still being used for observation
purposes if you have any questions please call me at (214)748-
1300 ext. 464.

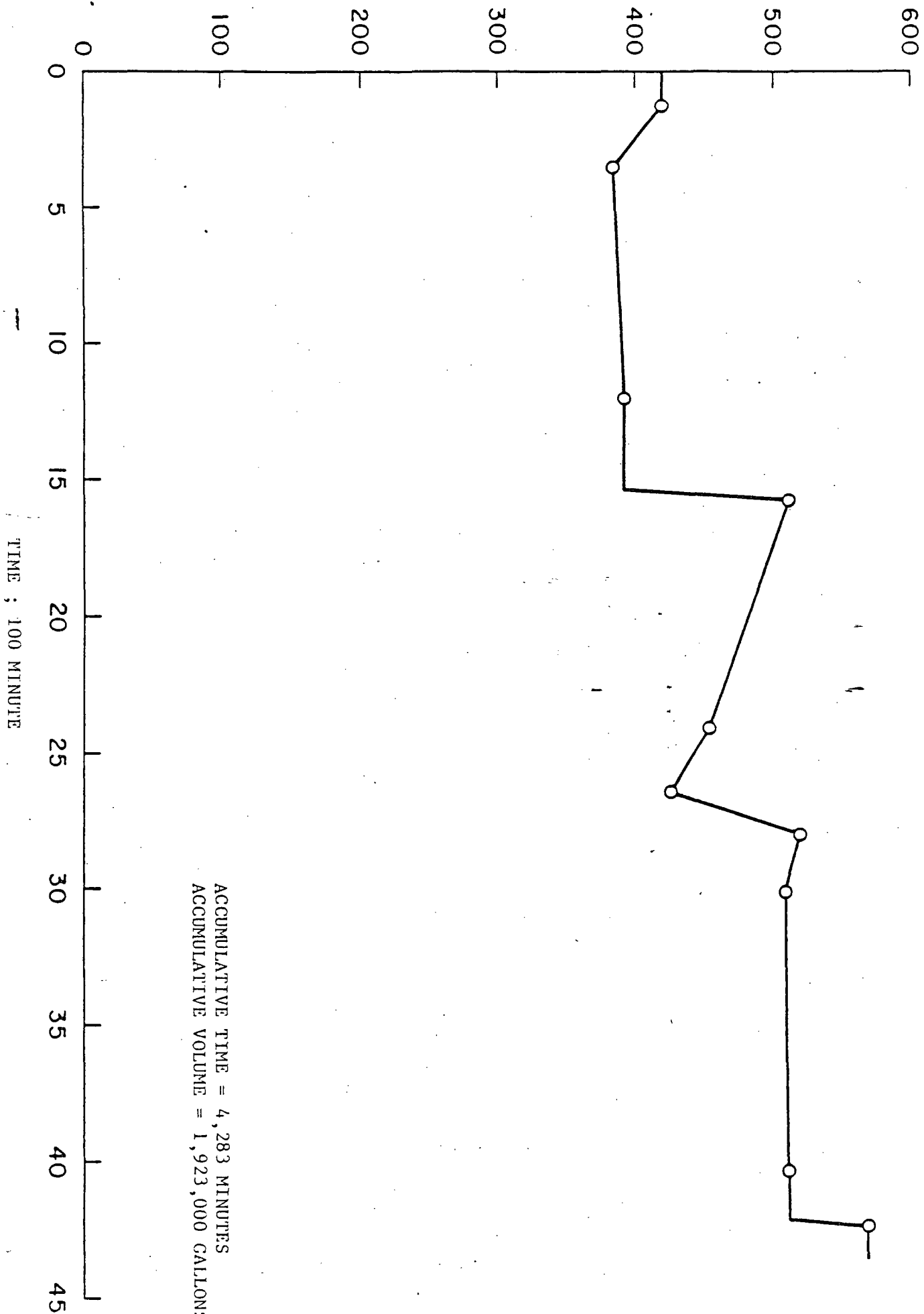
Very truly yours

HUNT ENERGY CORPORATION

G. S. BUMGARNER JR.
GEOHERMAL OPERATIONS

GSB:jv
Enclosures

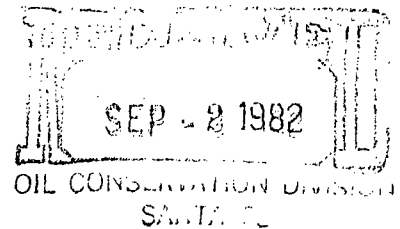
FLOWRATE ; gpm



HUNT ENERGY CORPORATION
1601 ELM STREET
2800 THANKSGIVING TOWER
DALLAS, TEXAS 7520

August 31, 1982

New Mexico State Oil &
Gas Commission
Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87503
Attn: Mr. Carl Ulvog

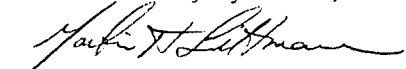


Dear Mr. Ulvog,

Enclosed is the chemical analysis from the flow test of Radium Springs 25-34 which you requested from Roy Cunniff.

If you need anything further please feel free to call me at (214) 573-8718.

Sincerely yours,


Martin H. Littmann

To: G. S. Bumgarner, Geologist; Hunt Energy Corp.

From: Andrew Lee Bristol, Analytical Consultant

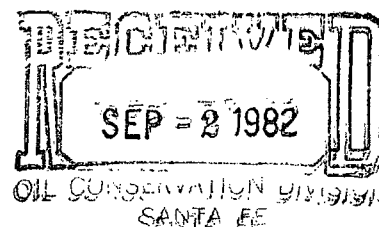
Subject: Test samples taken February 2 & 3, 1981 at first hole Radium Springs, NM

Sample			pH	mmhos/cm E.C.	Na	K	Ca	mg/L		Cl	CO ₃	HCO ₃
								Mg				
1	2/2/81	1:45 PM	9.14	3.47	829.9	56.7	14.6	.6	840.9	48.6	232.1	
2	2/2/81	5:00 PM	9.30	3.38	792.2	55.9	14.6	.8	789.9	67.8	206.4	
3	2/2/81	8:15 PM	9.21	3.31	769.7	54.7	11.2	1.0	789.9	60.0	237.0	
4	2/2/81	11:30 PM	9.13	3.10	703.5	52.4	6.8	1.0	683.5	57.0	234.5	
5	2/3/81	2:00 AM	9.16	3.09	689.0	52.4	6.0	1.1	626.8	64.8	218.6	
6	2/3/81	5:30 AM	9.15	3.02	680.5	52.4	5.2	1.2	591.4	72.0	225.4	

Sample	mg/L										
	SO ₄	NO ₃ -N	NO ₂ -N	NH ₄ -N	B	SiO ₂	F	Fe	Mn	As	Pb
1	437.5	56.2	66.5	.71	.71	56.0	5.70	9.94	.77	.007	< .01
2	415.0	24.6	64.0	.62	.68	57.5	6.00	7.07	.62	.006	< .01
3	400.0	9.2	59.0	.70	.66	58.0	5.85	6.92	.77	.006	< .01
4	392.5	6.7	41.0	.68	.65	56.5	5.70	11.30	.89	.007	< .01
5	375.0	9.2	34.0	.57	.65	59.0	5.65	5.71	.58	.007	< .01
6	377.5	3.2	32.0	.55	.65	61.0	5.70	4.98	.50	.007	< .01

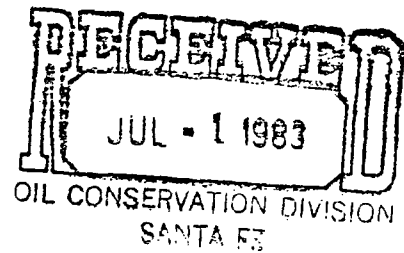
	mg/L					180/160 X100
	Sb	Hg	Zn	Sr	TDS	
1	<.5	<.0002	.06	.39	2302	.188 ± .019
2	<.5	<.0002	.06	.33	2174	.201 ± .002
3	<.5	<.0002	.04	.28	2110	.199 ± .002
4	<.5	<.0002	.04	.23	1970	.208 ± .006
5	<.5	<.0002	.03	.23	1970	.205 ± .007
6	<.5	<.0002	.02	.21	1920	.201 ± .011

.204 ± .007 for tap H₂O



Water analysis

LAMAR HUNT
2800 THANKSGIVING TOWER
DALLAS, TEXAS 75201



June 28, 1983

Carl Ulvog
New Mexico State Oil & Gas
Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87503

Dear Mr. Ulvog:

Enclosed please find results of the chemical analysis of water samples collected during our recent pump test of Radium Springs geothermal well #25-34.

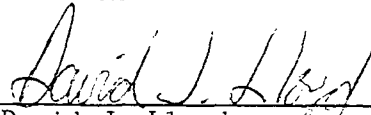
The water was produced using an air-lift method. This was accomplished by pumping air down the hole through 2 3/8 inch tubing which had been suspended in the wellbore at a depth of 700 feet. The air was pumped utilizing a standard oilfield type air compressor. The air compressor did not have throttling capabilities, so we were unable to run a staged test as originally intended.

Included with the above referenced analyses is a table indicating when the samples were taken. Also enclosed is graph of flowrate vs. time.

If you have any further questions or desire clarification, please don't hesitate to give me a call.

Sincerely,

LAMAR HUNT


David J. Lloyd
Geothermal Operations

TIME OF SAMPLE TAKING

DATE	Sample No.	Real Time	Total Flow Time (min)
5-2-83	#1	15:45	255
5-3-83	#2	10:20	1370
	#3	15:40	1495
5-4-83	#4	9:55	2590
	#5	12:30	2680
	#6	17:00	2981
5-5-83	#7	10:00	4000
	#8	12:10	4130
	#9	15:00	4283

To: Roy Cunniff, PSL Box 3PSL

From: Andrew Lee Bristol, Soil & Water Testing Lab

Subject: Water analysis of geothermal well (May 1983) (Lab Nos 5813-5821)

Sample	pH	mmhos/cm	mg/L							
		E.C.	Na	K	Ca	Mg	Cl	CO ₃	HCO ₃	SO ₄
1	7.94	6.21	1131	188.3	38.3	10.2	1643	0	185.5	250
2	7.98	6.17	1071	186.7	41.1	10.6	1643	0	183.0	150
3	7.86	6.23	1127	187.5	53.3	11.6	1621	0	238.0	250
4	7.94	6.17	1099	185.0	43.8	11.2	1621	0	209.9	200
5	7.86	6.18	1131	186.7	54.1	11.5	1665	0	239.2	200
6	7.93	6.18	1031	189.2	49.0	11.3	1599	0	288.0	150
7	8.11	6.18	1141	190.1	44.4	11.1	1688	0	219.7	80
8	8.11	6.26	1113	190.1	46.9	11.0	1688	0	228.2	200
9	7.88	6.21	1122	188.3	50.5	10.7	1643	0	241.6	180

Sample	mg/L							TDS by Σ
	NO ₃ -N	SiO ₂	F	B	Fe	Mn	As	
1	<.01	140	.96	.99	.68	.03	.009	3585
2	.07	138	1.09	.92	.61	.02	.009	3306
3	.02	137	1.03	.96	.87	.02	.009	3628
4	.04	135	1.00	.89	.47	.03	.008	3508
5	.04	133	1.03	.91	.70	.03	.008	3623
6	.04	132	1.03	.90	.31	.03	.008	3466
7	.06	132	1.03	.84	.16	.03	.008	3523
8	.06	140	1.06	.86	.16	.03	.008	3634
9	.04	135	1.07	.82	.65	.04	.008	3588

Sample	mg/L						
	Ba	Cd	Cr	Pb	Hg	Se	Ag
1	.15	<.005	<.01	<.005	.0011	<.001	<.05
2	.16	<.005	<.01	.019	.0002	<.001	<.05
3	.16	<.005	<.01	.022	<.0002	<.001	<.05
4	.15	<.005	.01	.016	<.0002	<.001	<.05
5	.16	<.005	<.01	.018	.0002	<.001	<.05
6	.14	<.005	<.01	.014	<.0002	<.001	<.05
7	.14	<.005	.02	.010	<.0002	<.001	<.05
8	.15	<.005	<.01	.011	<.0002	<.001	<.05
9	.15	<.005	<.01	.028	<.0002	<.001	<.05

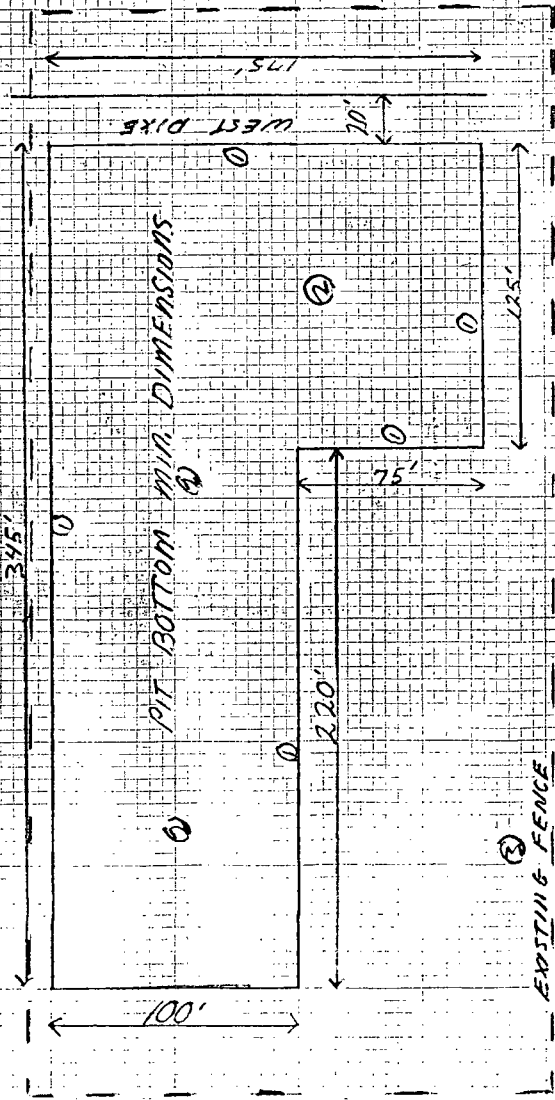
LAMAR HUNT 25-34

S1
RADIUM SPRINGS
4/6/83 CHARLIE HOUGHTON

NEW PIT CONFIGURATION

TOP OF CONCRETE CEMENT

① EXISTING WELL



EXISTING PITS

EXISTING WELL

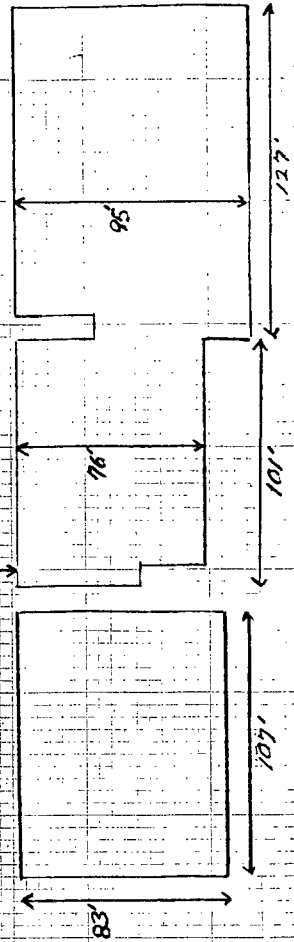
③ EXISTING FENCE

FREE FALL SLOPE

MIN 2-1 SLOPE

WEST DIKE PROFILE

MIN 10'



NOTES

- ① ALL ACCESSIBLE BANKS SHALL BE MIN 2:1 SLOPES OR NON CAVING ANGLES
- ② ENTIRE PIT BOTTOM SHALL GIVE MIN USABLE DEPTH OF 10' MEASURED FROM TOP OF CONCRETE SURROUNDING WELL CASING
- ③ CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING FENCE