

CALPINE

0135128664

SWD

12/29/01
CALPINE NATURAL GAS COMPANY
LABOR UNIT
1200 17th STREET, SUITE 770
DENVER, COLORADO 80202
720-350-9144
720-350-9140 FAX

December 12, 2001

State of New Mexico
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

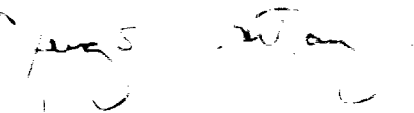
State of New Mexico
Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Gentlemen:

(30-045-26458)

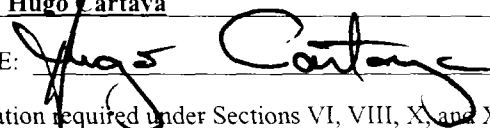
Enclosed please find an application for authorization to inject water into the Roosevelt #1. We are requesting that the application be approved administratively. Please feel free to call me if you have any questions.

Sincerely



Hugo Cartaya
Production Manager

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance XX Disposal _____ Storage
Application qualifies for administrative approval? XX Yes _____ No
- II. OPERATOR: Calpine Natural Gas
ADDRESS: 1200 17th Street, Ste. 770, Denver, Colorado 80202
CONTACT PARTY: Hugo Cartava PHONE: 720-946-1302
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? _____ Yes XX No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review, which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Hugo Cartava TITLE: Production Manager
SIGNATURE:  DATE: 11/30/01
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

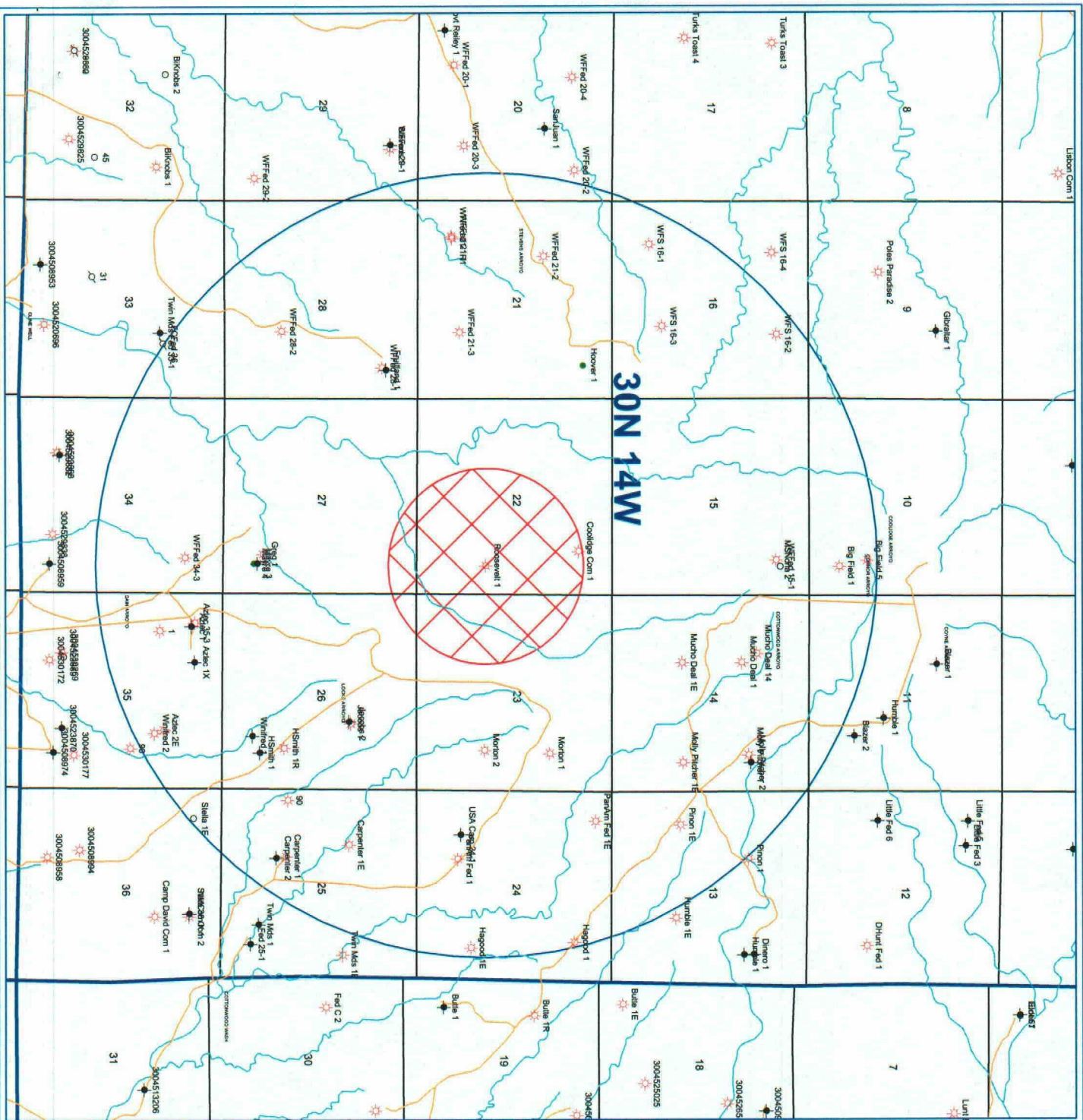
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.



CALPINE NATURAL GAS

San Juan Basin New Mexico

Roosevelt #1

1 1/2 mile radius circle

2 mile radius circle

WELL SYMBOLS

-  Location Only
-  Oil Well
-  Gas Well
-  Plugged and Abandoned
-  Abandoned Well

MAP PROJECTION

State Plane : New Mexico West (NAD27)
 Transverse Mercator Projection
 Ellipsoid: Clarke 1866
 Central Meridian : -107.833333
 Latitude of Origin : 31.000000
 False Northing : 0.0
 False Easting : 152400.3
 Scale Factor At Origin : 0.9999



FEEET

INJECTION WELL DATA SHEET

OPERATOR: Calpine Natural Gas
 WELL NAME & NUMBER: Roosvelt #1

WELL LOCATION: 1850' FSL & 790' FEL NESE

I UNIT LETTER 22 SECTION 30N TOWNSHIP 14W RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATA*(See Attached)*Surface Casing

Hole Size: 12 1/4" Casing Size: 8 5/8" 24#

Cemented with: sx. or 148 ft3 Class B w/ 2% CaCl ft³

Top of Cement: Surface Method Determined: Visual

Intermediate Casing

Hole Size: Casing Size:

Cemented with: sx. or ft³

Top of Cement: Method Determined:

Production Casing

Hole Size: 7 7/8" Casing Size: 4 1/2", 11.6#

Cemented with: 875 sx. or 1663 ft3 Class B ft³

Top of Cement: Unknown Method Determined: No Log

Total Depth: 6159 KB

Injection Interval

2802 feet to 3830 Perforated

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2 7/8" Lining Material: _____Type of Packer: Halliburton Model G-6Packer Setting Depth: 2752'

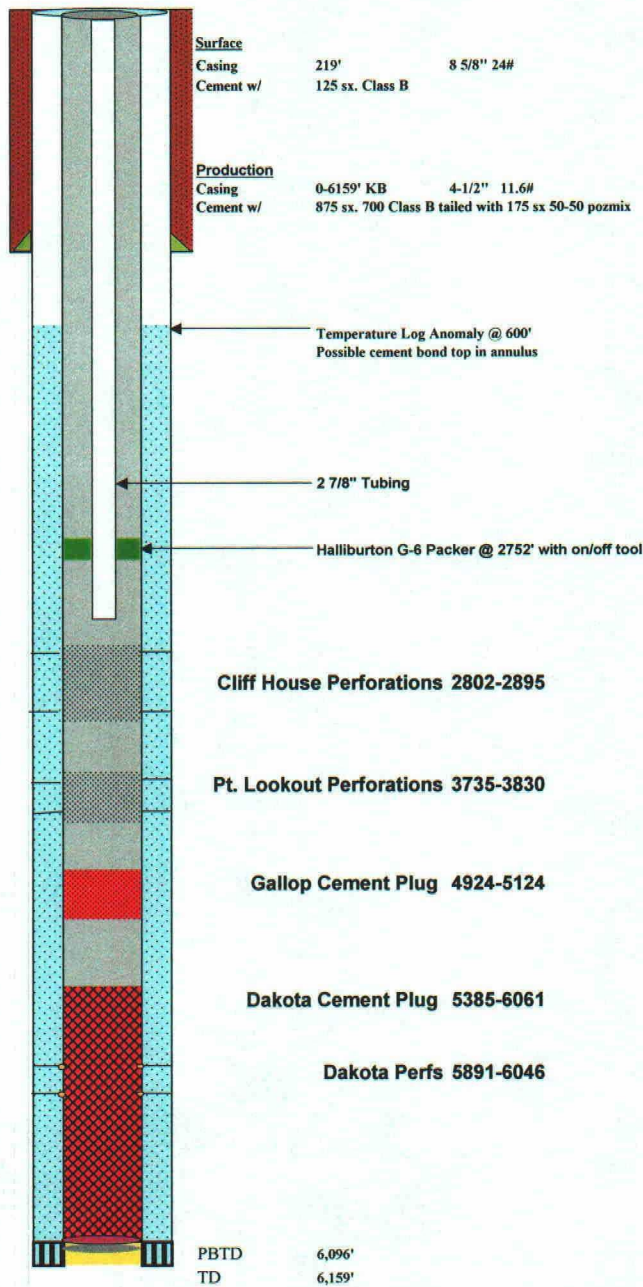
Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____

Yes XX No _____If no, for what purpose was the well originally drilled? Dakota Gas Production2. Name of the Injection Formation: Point Lookout and Cliff House3. Name of Field or Pool (if applicable): Basin Dakota4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Dakota Perfs (5891-6046) 1st Cement plug to be set 6061 - 5685 (50 sx.), 2nd Cement plug to be set 5124 - 4924 (15 sx.).5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Fruitland Coal Depth 1260-1272. Pictured Cliffs 1272-1970. Beneath injection zone is Dakota (@ 5889' KB

ROOSEVELT #1



Surface Location 1850'FSL & 790' FEL NESE Sec 22 T30N R14W

Field Basin Dakota
 County San Juan
 State New Mexico
 API No. 30-045-26458
 Lease No. NM-20314
 G.L. Elevation 5647'
 K.B. Elevation 5661'

Supplement to State of New Mexico C-108

V. See attached map

VI. Wells within Area of Review

- a) Coolidge #1
- b) Operator: Calpine Natural Gas
- c) 950' FNL and 1190' FEL Section 22, T30N, R14W
- d) Producer of natural gas from Dakota formation (Perfs. 5912-6021)
- e) Drilled and completed March of 1985
- f) TD: 6187'; PBTD: 6139'
- g) Status: Shut-In

VII. Operating Data

- a) Proposed Average Injection Rate: 600 BWPD
- b) Maximum Injection Rate: 1400 BWPD
- c) Closed System with injection water placed into a series of 400 Bbl. tanks and then filtered into a suction tank and then pumped into the well.
- d) Proposed Average Injection Pressure: < 300 psig
- e) Maximum Injection Pressure: +/- 900 psig
- f) Water Source will be Fruitland Coal and Pictured Cliffs production and is compatible with receiving formation. Offset well in Section 15, T30N, R14W water from Fruitland Coal has TDS= 3970 ppm. Offset well Morton #1 in Section 23-30N-14W from the Pictured Cliffs has TDS=9315 ppm.
- g) Will swab in and obtain water sample during Recompletion and analyze water at that time.

VIII. Geologic Data of Injection Zone

- a) Formation Name: Point Lookout and Cliff House
- b) Description: Sandstone interspersed with shales
- c) Thickness: 873' from 3672- 4055' KB (Pt. Lookout) and 2799' - 3672' KB (Cliff House)
- d) Point Lookout will be perforated 3735-3830'. Cliff House will be perforated 2802' - 2895'.
- e) Aquifers with water above Cliff House will be Fruitland Coal and Pictured Cliffs with TDS +/- 3900 ppm.
- f) No aquifers below Cliff House/Point Lookout with water less than 10,000 ppm.

IX. Stimulation Program

- a) If stimulation is required, it is anticipated that a small acid job will be done to clean up the perforations.

X. Logs submitted in 1985 at time of completion.

XI. Not applicable.

XII. Calpine Natural Gas has examined available engineering and geologic data and has found no evidence of open faults or hydrologic connections between the proposed disposal zones and any underground sources of drinking water.

XIV. Attached is a copy of the certified mail to the owner of the surface and to each leasehold operator within one half mile of the well location. Attached is a copy of the proof of publication.

AFFIDAVIT OF PUBLICATION

Ad No. 45294

STATE OF NEW MEXICO County of San Juan:

CONNIE PRUITT, being duly sworn says:
That she is the Classified Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meeting of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s):
Monday, November 12, Tuesday, November 13, Wednesday, November 14, Thursday, November 15, Friday, November 16, Saturday, November 17, & Sunday, November 18, 2001.

And the cost of the publication is \$481.96.

Connie Pruitt

ON 11/20/2001 CONNIE PRUITT appeared before me, whom I know personally to be the person who signed the above document.

Jacqueline L. Allcorn
My Commission Expires October 22, 2005

COPY OF PUBLICATION

916	Legals
NOTIFICATION OF INTENT TO CONVERT WELL TO WATER DISPOSAL	
Contact party:	Calpine Natural Gas 1200 17th Street Suite 770 Denver, Colorado 80202 Attention: Hugo Cartaya (720) 946-1302
Well Name and Legal Description:	Roosevelt #1 1850' FSL & 790' FEL Section 22, Township 30N, Range 14W San Juan County, New Mexico
The intended purpose of converting the Roosevelt #1 to a water disposal facility is to dispose of water from nearby Calpine Natural Gas wells therefore reducing the operating expenses of water disposal and reduce the traffic associated with trucking water.	
Formation Name and Depth:	Point Lookout 3692-4055 Cliff House 2799-3672
Maximum injection rate is proposed to be 1400 BWPD.	
Maximum injection pressure is proposed to be 900 psig.	
Interested parties must file their objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, New Mexico 87505 within 15 days.	
Legal No. 45294, published in The Daily Times, Farmington, New Mexico, Monday, November 12, Tuesday, November 13, Wednesday, November 14, Thursday, November 15, Friday, November 16, Saturday, November 17, & Sunday, November 18, 2001.	

7099 3400 0025 2460 7805

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Postage		Postmark Here
Postage & Fees		
Postage (Domestic Mail Only; Insurance Coverage Provided)		
Domestic Mail Only Fee (Domestic Mail Only)		
Total Postage & Fees \$		
Recipient's Name (Print or Type Name of Addressee) Dugan, Barbara Corp. 24 E. Broadway St. Tulsa, Okla 74101		

PS Form 3800, February 2000 See Reverse for Instructions

7099 3400 0025 2460 7753

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Postage		Postmark Here
Postage & Fees		
Postage (Domestic Mail Only; Insurance Coverage Provided)		
Domestic Mail Only Fee (Domestic Mail Only)		
Total Postage & Fees \$		
Recipient's Name (Print or Type Name of Addressee) Business of Local Management 1235 East 4th Street Tulsa, Okla 74101		

PS Form 3800, February 2000 See Reverse for Instructions

7099 3400 0025 2460 7795

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Postage		Postmark Here
Postage & Fees		
Postage (Domestic Mail Only; Insurance Coverage Provided)		
Domestic Mail Only Fee (Domestic Mail Only)		
Total Postage & Fees \$		
Recipient's Name (Print or Type Name of Addressee) Richardson Operating Company 1000 Lincoln St Tulsa, Ok 74103		

PS Form 3800, February 2000 See Reverse for Instructions

FORM 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reenter a different reservoir.

Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.

NM 20314

6. If Indian, Allottee or Tribe Name

7. If Unit or CA. Agreement Designation

8. Well Name and No.

Roosevelt #1

9. API Well No.

30-045-26458

10. Field and Pool, or Exploratory Area

Basin Dakota

11. County or Parish, State

San Juan County, New Mexico

SUBMIT IN TRIPLICATE

1. Type of Well

Oil

Gas

☐

Well

☒

Well

☐

Other

2. Name of Operator

Calpine Natural Gas

3. Address and Telephone No.

1200 17th Street, Suite 770, Denver, CO 80202

720-359-9144

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1850' FSL & 790' FEL Sec. 22-T30N-14W

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒

Notice of Intent

☐

Subsequent Report

☐

Final Abandonment Notice

TYPE OF ACTION

☐

Abandonment

☐

Recompletion

☐

Plugging Back

☐

Casing Repair

☐

Altering Casing

☐

Other

☐

Change of Plans

☐

New Construction

☐

Non-Routine Fracturing

☐

Water Shut-Off

☒

Conversion to Injection

☐

Dispose Water

(Note: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state 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.)*

Calpine is proposing to abandon the existing formation and convert the well to a water disposal facility. The proposed procedure is as follows:
Plug Dakota perforations (5891-6046) with 50 sx. Cement from 6061-5385. Set 15 sk. plug over Galloo (5124-4924). Run Cement Bond Log from 4924 to surface. If necessary, perform remedial cement job and cement to surface. Perforate Point Lookout as follows: 3735-45, 3762-70, 3790-3800, 3810-30 with 4 SPF. Perforate Cliff House as follows: 2802-08, 2816-32, 2840-60, 2870-80, 2882-95 with 4 SPF. Set Halliburton Model G-6 packer at 2752'. Run 2 7/8" tubing and land in packer. Test annulus to 500 psig. Run 6 step injection test down tubing. Install surface equipment.

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

Signed

Hugo Cartaya

Title Production Manager

Date

12/12/01

(This space for Federal or State office use)

Approved by

Title

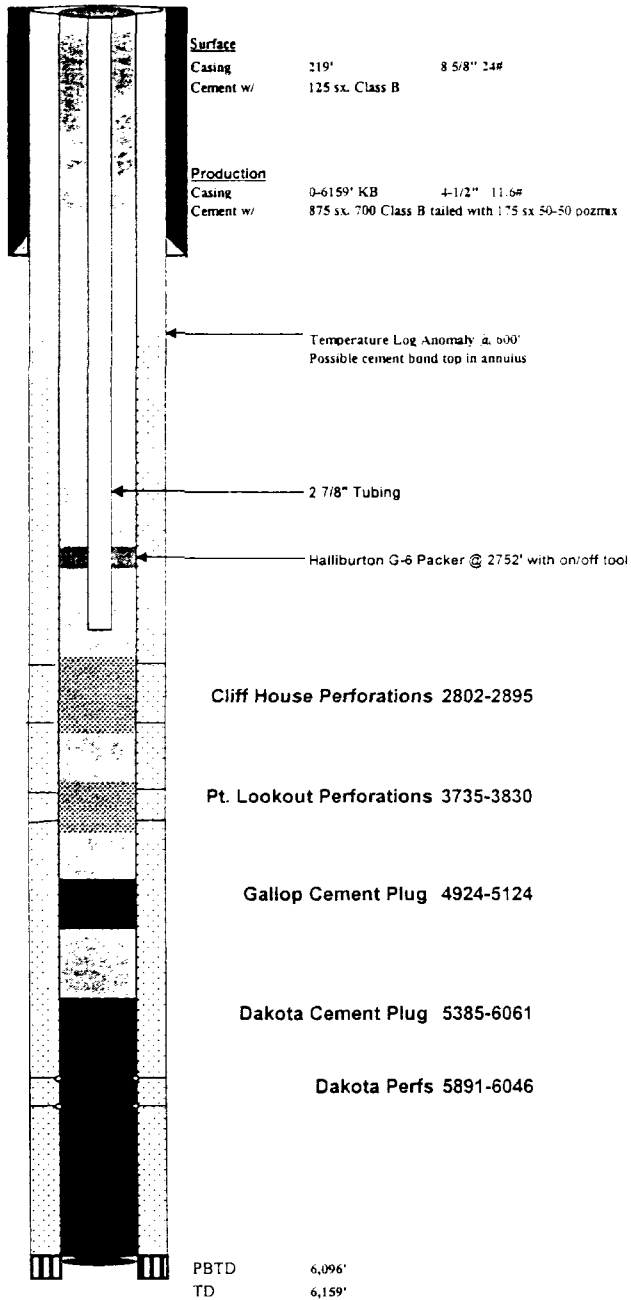
Date

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instructions on Reverse Side

ROOSEVELT #1



Surface Location 1850' FSL & 790' FEL NESE Sec 22 T30N R14W

Field Basin Dakota
County San Juan
State New Mexico
API No. 30-045-26458
Lease No. NM-20314
G.L. Elevation 5647'
K.B. Elevation 5661'

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

(See other instructions on reverse side)

Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other ☐

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP EN ☐ PLUG BACK ☐ DIFF RESERV ☐ Other ☐

2. NAME OF OPERATOR
Robert L. Bayless

3. ADDRESS OF OPERATOR
P.O. Box 168, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 950' FNL & 1190' FEL
At top prod. interval reported below same
At total depth same

14. PERMITS REQUIRED (Check appropriate box)
BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

5. LEASE DESIGNATION AND SEA
NM 15272

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Coolidge Com

9. WELL NO.
#1

10. FIELD AND POOL, OR WILDCAT
Basin Dakota

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 22, T30N, R14W

12. COUNTY OR PARISH
San Juan

13. STATE
NM

15. DATE SPUDDED 1-21-85 16. DATE T.D. REACHED 1-29-85 17. DATE COMPL. (Ready to prod.) 3-6-85 18. ELEVATIONS (DF, RKB, RT, GE, ETC.)* 5681' RKB 19. ELEV. CASINGHEAD 5671'

20. TOTAL DEPTH, MD & TVD 6190' 21. PLUG, BACK T.D., MD & TVD 6139' 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 0-TD 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 5912-6051' Dakota 25. WAS DIRECTIONAL SURVEY MADE no

26. TYPE ELECTRIC AND OTHER LOGS RUN
Induction-Neutron Density, GR-CLL-CBL logs

27. WAS WELL CORED no

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	198'	12 1/2"	118ft ³ Class B w/2% CaCl ₂	circ. to surface
4-1/2"	11.6#	6183'	7-7/8"	1st-258 ft Class B w/2% D-79	followed by
				221ft 50-50 pozmix w/2%	gel 10% salt
				2nd-1339ft Class B w/2% D-79	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
1 1/2"	5942'	none

31. PERFORATION RECORD (Interval, size and number)

Interval	Size	Number
5912-5923	11'	11 holes (3-1/8")
5932-5938	6'	6 holes
5943-5947	4'	4 holes
5998-6022	24'	12 holes
6030-6051	21'	21 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5912-6051	500 gals 7 1/2% HCL acid w/81 RCN ball sealers. Frac-83,000 gallons 75 quality foam w/2% KCL water 1 gal/1000 surfactant, 1/2 gal/1000 clay stabilizer & 135,000 lbs 20-40 sand.

33. PRODUCTION

DATE FIRST PRODUCTION 2-28-85 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) flowing WELL STATUS (Producing or shut-in) shut-in; waiting on connec.

DATE OF TEST 3/14/85 HOURS TESTED 3 CHOKE SIZE .750 PROD'N. FOR TEST PERIOD 383 OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO

FLOW. TUBING PRESS. 233 CASINO PRESSURE 541 CALCULATED 24-HOUR RATE 3066 AOF: 3279

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) to be sold TEST WITNESSED BY Tom Smith

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [Signature] TITLE Operator DATE 3/15/85

ACCEPTED FOR RECORD

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.