Submit 3 Copies To Appropriate District Office	State of New N	Mexico .		Form C-103
District [ . / E	Energy, Minerals and Na	itural Resources		Revised March 25, 1999
1625 N. French Dr., Hobbs, NM 88240			WELL API NO.	
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATIO	N DIVISION	30-045-26458	· · · · · · · · · · · · · · · · · · ·
District III	1220 South St. Fr	ancis Dr.	5. Indicate Type	
1000 Rio Brazos Rd., Aztec, NM 87410	-6 Santa Fe, NM		STATE	FEE
1220 S. St. Francis Dr., Santa Fe, NM 87505	, , , , , , , , , , , , , , , , , , ,	07505	6. State Oil & NM-20314	Gas Lease No.
SUNDRY NOTICES A	ND REPORTS ON WELI	LS	7 Lease Name	or Unit Agreement Name:
(DO NOT USE THIS FORM FOR PROPOSALS TO	DRILL OF TO DEEDEN OF I	LUC DACK TO A	. Dease Ivamic	or other Agreement Name.
DIFFERENT RESERVOIR. USE "APPLICATION PROPOSALS.)	FOR PERMIT" (FORM C-107)	EdB shah	Roosevelt #1	
1. Type of Well:		<b>4</b> (2)		
Oil Well Gas Well Other		IAN 2002		
2. Name of Operator		ECEIVED SA	8. Well No.	
Calpine Natural Gas		LCON DIV	#1	
3. Address of Operator	ICC)	DIST. 3	9. Pool name o	
1200 17 <sup>th</sup> Street, Ste 770, Denver, Co	olorado 80202	<u> </u>	S Harris Dako	12 SW M. Mesaverde
4. Well Location		I GALLERY	,	7
Unit Letter <u>I</u> : <u>1850</u>	feet from the South	fine and 790 f	eet from the East	line
Section 22	Township 30N	Range 14W	NMPM	County San Juan
10.	Elevation (Show whether I	DR, RKB, RT, GR, etc.	)	County Can Juan
5	661 KB; 5647 GL			
11. Check Approp	riate Box to Indicate	Nature of Notice, I	Report or Other	Data
NOTICE OF INTENT			SEQUENT RE	PORT OF:
PERFORM REMEDIAL WORK PLUG	S AND ABANDON 🔲	REMEDIAL WORK	· 🔲	ALTERING CASING
TEMPORARILY ABANDON   CHAN	IGE PLANS	COMMENCE DRIL	LING OPNS.	PLUG AND
PULL OR ALTER CASING   MULT	TPLE	CASING TEST AN		ABANDONMENT
	PLETION	CASING TEST AN CEMENT JOB	р П	
OTHER: Plug Back and Convert to WI		OTHER:		П
12. Describe proposed or completed operat	ions. (Clearly state all per	tinent details, and giv	e pertinent dates, i	ncluding estimated date of
starting any proposed work). SEE RUL recompilation.	E 1103. For Multiple Cor	npletions: Attach wel	lbore diagram of p	proposed completion or
Plug Dakota perforations (5891 - 6046) wi	th 50 sx. cement from 60	61-5385. Set 15 sk. p	lug over Galløp (:	5124 – 4924). Run Cement
Bond Log from 4924 to surface. If necessa	ry, perform remedial cei	ment iob and cement	to surface Perfo	rate Point I ookout as
follows: 3735 – 45, 3762 – 70, 3790 – 3800, 2840 – 60, 2870 – 80, 2882 – 95 with 4 chart	3810 – 30 with 4 shots p	er foot. Perforate Cli	ff House as follow	vs: 2802 – 08, 2816 – 32,
2840 – 60, 2870 – 80, 2882 – 95 with 4 shot packer. Test annulus to 500 psig. Run 6-st	s per 100t. Set Halliburt( en injection test down tu	on Model G-6 packer	at 2752'. Run 2	//8" tubing and land in
Process 2 220 ammand to 500 poig. Kan 0-30	ch injection test down to	oing. Instan surface	equipment and p	umps.
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				ARTON
			i ere	. 1
		•		· 14
•			* <del>-</del>	V
I hereby certify that the information above is	true and complete to the b	est of my knowledge	and belief	<del></del>
		out or my late whough	una conor.	
SIGNATURE THE STATE OF	Manufittle _	Production Manag	er	DATE 11/30/01
Type or print name Hugo Cartaya	( )		T.1.	1 37 500 046 1000
(This space for State use)			1 ele	phone No. 720-946-1302
		ITY SM & ALES 1795*14	198 <b>818</b> - 198	JAN 17 2002
APPPROVED BY				
Conditions of approval, if any: 5 w D o	order to be is	sued from th	e Engineerin	y Break a. 1
NM OC.	O Santa Fe-NMC	)CD	7 1	
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### Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

FORM C-108 Revised 4-1-98

### **APPLICATION FOR AUTHORIZATION TO INJECT**

I.	PURPOSE: Secondary Recovery Pressure Maintenance XX Disposal Storag 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 Cartaya 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:
<b>#</b> \$ 7777	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>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.).</li> </ol>
+∨ш.	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 Cartaya 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

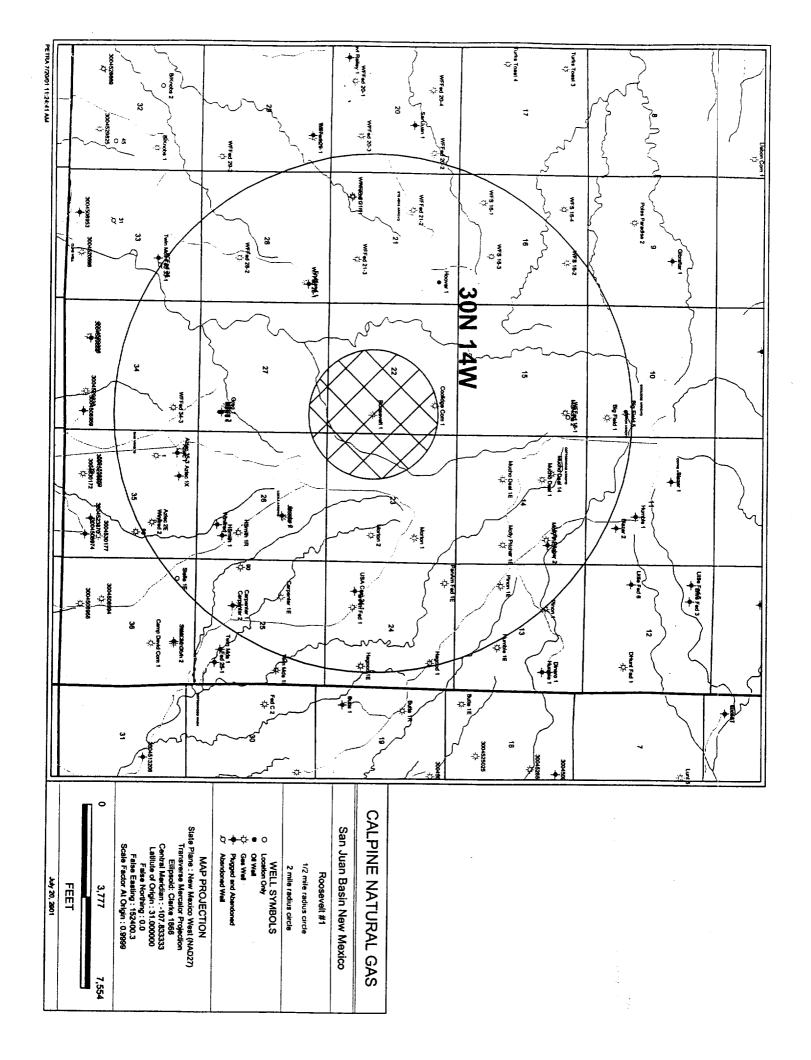
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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.



# INJECTION WELL DATA SHEET

OPERATOR: <u>Calpine Natural Gas</u> WELL NAME & NUMBER: <u>Roosevelt #1</u>

14W	RANGE			8 5/8" 24#	w/ 2% CaCl ft <sup>3</sup>	Visual			H.			11.6#	s B H <sup>3</sup>	No Log
30K	TOWNSHIP	CTION DATA	Casing	Casing Size: 8 5	or 148 ft3 Class B w/ 2% CaCl ft <sup>3</sup>	Method Determined: Visual	e Casing	Casing Size:	or	Method Determined:	Casing	Casing Size: 4 1/2", 11.6#	or 1663 ft3 Class B	Method Determined:
22	SECTION	WELL CONSTRUCTION DATA	Surface Casing	4	SX.	Surface	Intermediate Casing		SX.		Production Casing	.8,,	sx.	nknown
	UNIT LETTER	(See Attached)		Hole Size: 12 1/4"	Cemented with:	Top of Cement:		Hole Size:	Cemented with:	Top of Cement:		Hole Size: 77/8"	Cemented with: 875 sx.	Top of Cement: <u>Unknown</u>
WELL LOCATION: 1850' FSL & 790' FEL NESE	FOOTAGE LOCATION	WELLBORE SCHEMATIC												
WELL LOCATION:														en light

(Perforated or Open Hole; indicate which)

feet to 3830 Perforated

Injection Interval

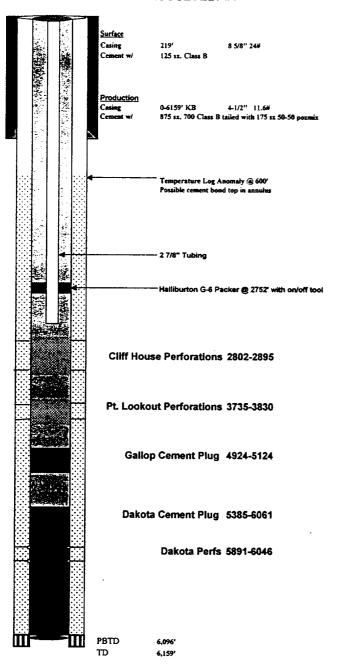
6159 KB

Total Depth:

## INJECTION WELL DATA SHEET

If no, for what purpose was the well originally drilled?		2. Name of the Injection Formation: Point Lookout and Cliff House	3. Name of Field or Pool (if applicable): Basin Datona SWD; Mrsn Vende 36/60	Ty T Ty	Type of Packer: Haliburton Model G-6  Packer Setting Depth: 2752  Other Type of Tubing/Casing Seal (if applicable):  Additional Data  Additional Data  Additional Data  If no, for what purpose was the well originally drilled? Dakota Gas Production  If no, for what purpose was the well originally drilled? Dakota Gas Production  If no, for what purpose was the well originally drilled? Dakota Gas Production  If no, for what purpose was the well originally drilled? Dakota Gas Production  If no, for what purpose was the well originally drilled? Dakota Gas Production  If no, for what purpose was the well originally drilled? Dakota Gas Production  If no, for what purpose was the well originally drilled? Dakota Gas Production  If no, for what purpose was the well or generation of the first one of the fried or Pool (if applicable): Basin Dakota Give the proposed intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Dakota Perfs (15 St.).  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 Qassoy KB
l (if applicable):  Additional Data  rijection?  Yes	nal Data  drilled?	nal Data drilled?	acker Setting Depth: 2752,  ther Type of Tubing/Casing Seal (if applicable):  Additional Data  Is this a new well drilled for injection?  If no, for what purpose was the well originally drilled?  Name of the Injection Formation: Point Lookout and to	Ţ,	
nal Data	nal Data drilled?	nal Data	ther Type of Tubing/Casing Seal (if applicable):  Additional Data  Is this a new well drilled for injection?  If no, for what purpose was the well originally drilled?  Name of the Injection Formation:  Point Lookout and to	Pe	
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Additional Data injection?	Additional Data injection? he well originally drilled?	Additional Data injection?  ne well originally drilled?	Is this a new well drilled for injection?  If no, for what purpose was the well originally drilled?  Name of the Injection Formation:  Point Lookout and to		
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	l	1 1	If no, for what purpose was the well originally drilled?  Name of the Injection Formation:  Point Lookout and 0	<del>-</del> i	injection?
Name of the Injection Formation: Point Lookout and C Name of Field or Pool (if applicable): Bagin Dakota	Name of the Injection Formation: Point Lookout and C Name of Field or Pool (if applicable): Bagin Dakota	Name of Field or Pool (if applicable): Bagin Dakota		4.	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.).
Name of the Injection Formation:  Name of Field or Pool (if applicable):  Has the well ever been perforated in any other zone(s)? List intervals and give plugging detail, i.e. sacks of cement or plu 1st Cement plug to be set 6061 - 5685 (50 sx.), 2nd Cement p	Name of the Injection Formation: Point Lookout and C  Name of Field or Pool (if applicable): Bagin Bakota  Has the well ever been perforated in any other zone(s)? List intervals and give plugging detail, i.e. sacks of cement or plu 1st Cement plug to be set 6061 - 5685 (50 sx.), 2nd Cement plug	Name of Field or Pool (if applicable): Basin Dakota  Has the well ever been perforated in any other zone(s)? List intervals and give plugging detail, i.e. sacks of cement or plu 1st Cement plug to be set 6061 - 5685 (50 sx.), 2nd Cement pl		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 County Basin Dakota San Juan New Mexico

State API No. Lease No. G.L. Elevation K.B. Elevation

30-045-26458 NM-20314

5647' 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.

ON 11/20/2001 CONNIE PRUITT appeared before me, whom I know personally to be the

Commission Expires October 22, 2005

person who signed the above document.

### COPY OF PUBLICATION

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 30, San Warl County, New W

The intended purpose of converting the Roosevelt #1 to a water disposi 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, Saturady, November 17, & Sunday, November 18, 2001