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2200 Bloomfield Highway Post Office Box 2810 Farmington, New Mexico 87499-2810

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August 27, 1993

New Mexico Oil Conservation Division State Land Office Building P.O. Box 2088 Santa Fe, New Mexico 87504

Subject: Central Bisti Unit No. 29

1980' FSL, 660' FEL Sec. 8, T25N, R12W

San Juan County, New Mexico

Dear Sir:

Enclosed for your approval is our Application for Authorization to Inject for the above referenced well. Upon receipt, an Affidavit of Publication will be forwarded to you.

If you have any questions please call me at (505) 326-3325. Sincerely,

Diane G. Jaramillo Administrative Manager

/dgj

Enclosure

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OIL CONSERVATION DIVISION PO BOX 2088 SANTA FE, NM 87504-2088

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? Yes No
II.	OPERATOR: Giant Exploration & Production Company
	ADDRESS: P.O. Box 2810, Farmington, New Mexico 87499
	CONTACT PARTY: Jeffrey R. Vaughan PHONE: (505) 326-3325
III.	WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project: X Yes No If yes, give the Division order number authorizing the project R-1636-A
٧.	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:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and 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 geological data on the injection zone including appropriate lithologic detail, geological 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/1 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 source 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.
ζ(NAME: Jeffrey R. Vaughan TITLE: Vice President/Operations
	SIGNATURE:DATE: August 10, 1993
*	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 circumstance of the earlier submittal.

DISTRIBUTION. Original and one conv to Santa Fe with one conv to the appropriate District Office

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 intaterial, 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 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;
- 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
- A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, PO Box 2088, Santa Fe, NM 87504-2088 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.

Giant Exploration & Production Company Application for Authorization to Inject Form C-108 Supplemental Information

> Central Bisti Unit Well No. 29 NE/4, SE/4, Sec. 8, T25N, R12W San Juan County, New Mexico

- I. Shown on Application
- II. Shown on Application
- III. Well data attached
 - IV. Shown on Application
 - V. Area of review is shown on attached map
- VI. Information for wells located in area of review are as follows:

Central Bisti Unit No. WI-14
Central Bisti Unit No. 27
Central Bisti Unit No. 28
Central Bisti Unit No. 30
Central Bisti Unit No. 34
Central Bisti Unit No. 42
Central Bisti Unit No. WI-62
Central Bisti Unit No. 65
Central Bisti Unit No. 73

- VII. 1. Proposed average injection rate is 600 bwpd, expected maximum injection rate is 1200 bwpd.
 - 2. This system will be closed.
 - 3. Average injection pressures are expected to be in the 943 956 psi range. Maximum injection pressure will be 956 psi.
 - 4. Refer to the attached water analysis report. Since the formation water to be encountered is primarily previously injected water, no problems are expected in mixing the two waters.
 - 5. This well is part of an extensive waterflood project active in the Carson Unit since 1959. All produced water is reinjected into the oil productive Lower Gallup sand to maintain pressure. Injection into the Lower Gallup sand is for waterflooding, not disposal.

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- VIII. The injection zone is the Lower Gallup sandstone. This zone is to be 19' in thickness with a top of 4763' as shown on the SP log previously submitted. No known sources of drinking water exist in this area. Water well drilling in this area has shown the Ojo Alamo to be dry.
 - IX. The well will be acidized if required to maintain injection rate and pressure.
 - X. Logs were previously submitted.
 - XI. No known sources of drinking water exist in this area.
 - XII. This well is part of the existing approved waterflood operation for the Carson Unit. It is not a disposal well.
- XIII. Proof of notification is attached.
 - XIV. Certification shown on Application.

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Giant Exploration & Production Company Well Bore Diagram

WELL NAME Central Bisti Unit Wel	1 No. 29
LOCATION 1980' FSL, 660' FEL	SECTION 8 T 25 N R 12 V
COUNTY San Juan	STATE New Mexico
SURFACE CASING	GLE_6216'
Hole Size: 12-1/4" Casing: 8-5/8", 24#, J-55	KBE_6223'
Casing Set @ 330' with 225 sks	DF
cement containing 2% CaCl.	WELL HISTORY
	Spud date: 8/24/59
FORMATION TOPS	Original owner: <u>Sunray Mid-Con</u> t.
	IP 10/14/59BOPD 21 BWPD 14
	MCFD_68 GOR_3238
	Completion Treatment:
	Frac with 20,000 gal crude a
	_20,000# 20-40 sand.
	CURRENT DATA
	Pumping Unit
	Tubing
CEMENT TOP 3300' (by TS)	Pump Size
<u>PERFORATIONS</u>	Rod string
4763'-70'	Remarks
47 2 '-82 '	
	Proposed water injection schematic.
PBD 4788' Proposed	Packer
	@4715'
PRODUCTION CASING Hole Size: 7-7/8"	"
Casing: 4-1/2", 9.5#, J-55	
Casing Set @ 4952' with 350 sks	
pozmix containing 2% gel.	
	4956' TD Date Last Revised: 8/18/93

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Well Name: Central Bisti Unit #29

1980' FSL, 660' FEL Sec. 8, T25N, R12W Legal Description:

San Juan County, N.M.

Oil Well Well Type:

08-24-59 Spud Date:

12-1/4" Surface Casing Hole Size: 8-5/8" Surface Casing Size: 330' Surface Casing Depth:

Cementing Record: 225 sks.

Production Casing Hole Size: Production Casing Size: Production Casing Depth: 7-7/8" 4-1/2" 4952

Cementing Record: 350 sks.

Perforation:

4763' - 4770' 4772' - 4782' 4792' - 4802' 4808' - 4815' 4819' - 4825' 4833' - 4844' 4848' - 4859'

Plug Back Depth: 4920'

4957' Total Depth:

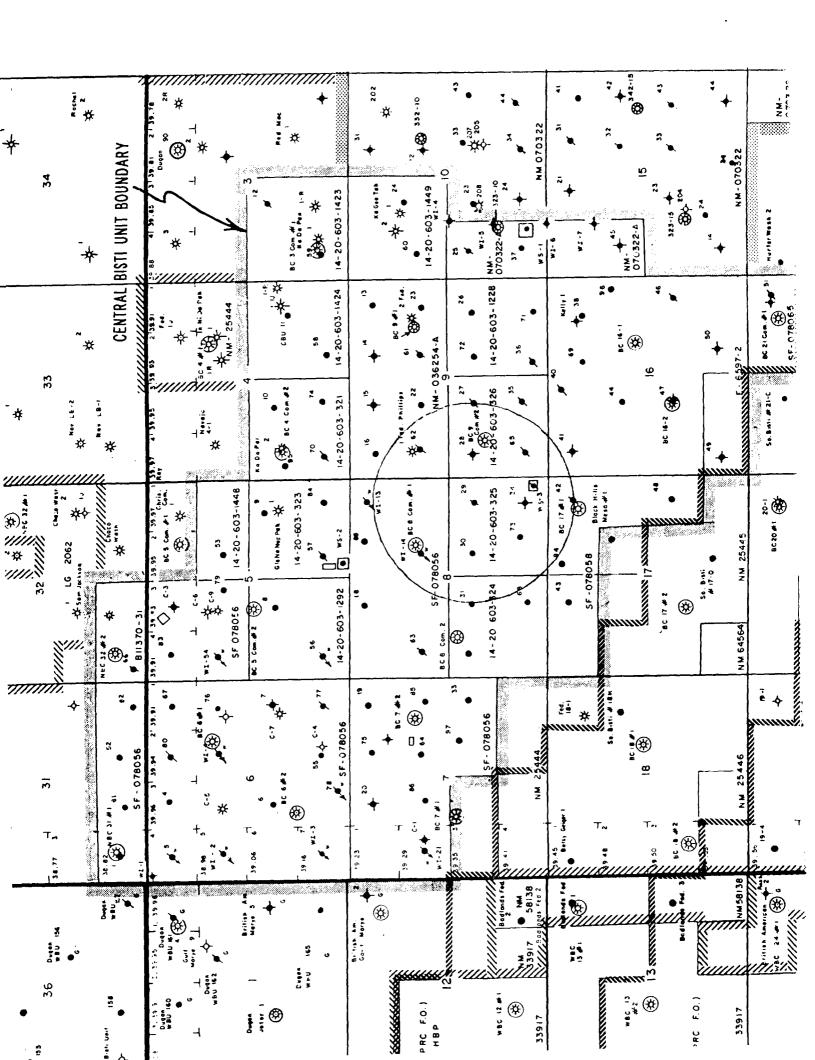
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CENTRAL BISTI - CARSON UNIT AREA

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Well Name: Central Bisti Unit WI-14

Legal Description: 1980' FNL, 1980' FEL

1980' FNL, 1980' FEL Sec. 8, T25N, R12W San Juan County, N.M.

Well Type: Water Injection

Spud Date: 06-15-56

Surface Casing Hole Size: 12-1/4"
Surface Casing Size: 8-5/8"
Surface Casing Depth: 198'

Cementing Record: 175 sks.

Production Casing Hole Size: 7-7/8"
Production Casing Size: 5-1/2"
Production Casing Depth: 4938'

Cementing Record: 200 sks.

Perforation: 4772' - 4784'

4809' - 4815' 4845' - 4850' 4857' - 4861'

Plug Back Depth: 4893'

Total Depth: 4940'

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Well Name: Central Bisti Unit #27

Legal Description: 1980' FSL, 1980' FWL

1980' FSL, 1980' FWL Sec. 9, T25N, R12W San Juan County, N.M.

Well Type: Oil Well

Spud Date: 09-02-59

Surface Casing Hole Size: 12-1/4"
Surface Casing Size: 8-5/8"
Surface Casing Depth: 315'

Cementing Record: 225 sks.

Production Casing Hole Size: 7-7/8"
Production Casing Size: 4-1/2"
Production Casing Depth: 4958'

Cementing Record: 300 sks.

Perforation: 4753' - 4772'

4753' - 4772' 4783' - 4793' 4798' - 4806' 4814' - 4821' 4827' - 4835' 4841' - 4848'

Plug Back Depth: 4924'

Total Depth: 4953'

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Central Bisti Unit #30 Well Name:

1980' FSL, 1980' FEL Sec. 8, T25N, R12W Legal Description:

San Juan County, N.M.

Well Type: Oil Well

05-19-56 Spud Date:

Surface Casing Hole Size: Surface Casing Size: Surface Casing Depth: 12-1/4" 8-5/8" 298

125 sks. Cementing Record:

Production Casing Hole Size: 7-7/8" Production Casing Size: 5-1/2" Production Casing Depth: 49401

Cementing Record: 450 sks.

Perforation: 4772' - 4782'

4806' - 4828' 4840' - 4848'

4930 Plug Back Depth:

Total Depth: 4940'

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Well Name: Central Bisti Unit WI-62

Legal Description: 1980' FNL, 660' FWL Sec. 9, T25N, R12W

San Juan County, N.M.

Well Type: Water Injection

Spud Date: 09-06-56

Surface Casing Hole Size: 11"
Surface Casing Size: 8-5/8"
Surface Casing Depth: 228'

Cementing Record: 100 sks.

Production Casing Hole Size: 7-7/8"
Production Casing Size: 5-1/2"
Production Casing Depth: 4891'

Cementing Record: 200 sks.

Perforation: 4754' - 4776' 4827' - 4833'

4827' - 4833' 4841' - 4850'

Plug Back Depth: 4856'

Total Depth: 4900'

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Well Name: Central Bisti Unit #65

Legal Description: 660' FSL, 660' FWL

660' FSL, 660' FWL Sec. 9, T25N, R12W San Juan County, N.M.

Well Type: Oil Well

Spud Date: 07-27-59

Surface Casing Hole Size: 12-1/4"
Surface Casing Size: 8-5/8"
Surface Casing Depth: 285'

Cementing Record: 175 sks.

Production Casing Hole Size: 7-7/8"
Production Casing Size: 5-1/2"
Production Casing Depth: 4930'

Cementing Record: 225 sks.

Perforation: 4742' - 4758'

4772' - 4806' 4815' - 4826' 4830' - 4842'

Plug Back Depth: 4896'

Total Depth: 4931'

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Well Name: Central Bisti Unit #73

Legal Description: 790' FSL, 1650' FEL Sec. 8, T25N, R12W

Sec. 8, T25N, R12W San Juan County, N.M.

Well Type: Oil Well

Spud Date: 11-06-80

Surface Casing Hole Size: 12-1/4"
Surface Casing Size: 8-5/8"
Surface Casing Depth: 242'

Cementing Record: 175 sks.

Production Casing Hole Size: 7-7/8"
Production Casing Size: 4-1/2"
Production Casing Depth: 4985'

Cementing Record: 425 sks.

Perforation: 4772' - 4778'

4794' - 4802' 4816' - 4822' 4834' - 4942' 4850' - 4856'

Plug Back Depth: 4947'

Total Depth: 5000'

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Giant Exploration & Production Company Well Bore Diagram

WELL NAME Central Bisti Unit W	Mell No. 28	
LOCATION 1980' FSL, 660' FWL		SECTION _9T _25 N_R _12 W
COUNTY San Juan		STATE New Mexico
SURFACE CASING		GLE
Hole Size: 12-1/4"		KBE_6209'
Casing: 8-5/8", 24#		
Casing Set @ 298' with 125 sks		DF
of cement.		WELL HISTORY
		WELL HISTORY
		0 11 1 2 2 4 4 5 5
		Spud date: 6/4/56
FORMATION TOPS		Original owner: <u>Amerada Petr.</u>
Pictured Cliffs 1132' Lewis 1280'		IPBOPD_126 & WPD
La Ventana 1842'		
Cliffhouse 2963'		MCFD 817 GOR 644
Menefee 3020'		Completion Treatment:
Point Lookout 3564') 1	Frac'd with 100,000 gal crude
<u>Mancos</u> 3714'	1 1 1	and 100,000# sand
Gallup 4647'		CURRENT DATA
Lower Gallup 4738'	<i>)</i>	CURRENT DATA
Lower Mancos 4898'		Pumping Unit
)	Tubing
CEMENT TOP 3040' (by T.S.)		Pump Size
PERFORATIONS		Rod string
4739'-66'	}	Remarks
4786'-96'	()	Formerly Joan White Well #2
4805'-12') /	
4821'-30'		P & A'd 3/71 as follows:
4835'-48'		
		Plugged Gallup perfs with 20
PBD 4920'	/ /	sks of cement from 4700' to
PRODUCTION CASING	/	4800'.
Hole Size:7-7/8"	/ \	Shot off casing at 1102', Set
Casing: 5-1/2", 15.5#, J-55	\	40 sks plug across casing
Casing Set @ 4935' with 450 sks		stub from 1052' to 1152'.
of cement.	$)$ $ $ \checkmark $ $ $ $	Set 60 sks plug from 1070' to
		1220'.
	 	Set 40 sks plug from 275' to
		375'
	4935 TD	Set 2 sks plug at surface.
	<u> </u>	Date Last Revised: 8/19/93

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Giant Exploration & Production Company Well Bore Diagram

WELL NAME Central Bisti Unit W	lell No. 34	
LOCATION 660' FSL, 660' FEL		SECTION <u>8</u> T <u>25 N R 12 W</u>
COUNTY San Juan		STATENew_Mexico
SURFACE CASING Hole Size: 12-1/4" Casing: 8-5/8", 24#		GLE 6229' KBE 6239'
Casing Set @ 286' with 100 sks containing 2% gel.		DF <u>6238'</u>
		WELL HISTORY
FORMATION TOPS		Spud date: 5/3/56 Original owner: Amerada Petr.
Pictured Cliffs 1136' Point Lookout 3578'		IP_5/24/93_BOPD_219_BWPD MCFD_316GOR1444
Upper Gallup 4658' Lower Gallup 4745'		Completion Treatment:
CEMENT TOP		CURRENT DATA Pumping Unit
PBD		Permanent packer at 4740'. Squeezed Gallup perfs with 50 sks cement. Spotted
PRODUCTION CASING Hole Size: 7-7/8" Casing: 5-1/2", 15.5# Casing Set @ 4918' with 450 sks cement containing 2% gel.		
	1919 TD	Data Last Povisod: 9/19/03

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Giant Exploration & Production Co. Well Bore Diagram

WELL NAME Central Bisti Unit We	11 No. 42
LOCATION 660' FNL. 660' FEL	SECTION 17 T 25 N R 12 W
COUNTY San Juan	STATE New Mexico
SURFACE CASING Hole Size: 13-3/8" Casing: 9-5/8", 32.3# Casing Set @ 240' with 200 sx of cement	Surface-240' 80 8x RBM 6240' DF 6238'
INTERMEDIATE CASING	950' 40 8x WELL HISTORY
Hole Size: 8-3/4" Casing: 7", 20# & 23# Casing Set @_ 4910' with 175 sx of cement. (Cmt. at 3575' by T.S.)	1134' 100 sx. Spud date: 3/29/56 1153' Original owner: Sunray Mid-Cont. RetainerIPBOPD_480BWPD GORMCF Completion treatment: 1342' 50 sx.
FORMATION TOPS	CURRENT DATA Pumping Unit
	3700' Tubing 15 sx. Pump Size Rod string Remarks
	Well plugged back to 1134'
<u>CEMENT TOP</u> 5048' (Calc.) <u>PERFORATIONS</u>	35 sx. Perforated in the Fruitland formation. Well is plugged and abandoned.
1106'-16'	5441' 25 8x.
PBD 1134' (Present) PRODUCTION CASING	5653' CIBP
Hole Size:6-1/8" Casing:_4-1/2", 10.5# Casing Set @5948' with 110 sx cement.	5710' CIBP
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My Comm expires:

STATE OF NEW MEXICO,
County of San Juan:
C.J. SALAZAR being duly sworn, says: "That she is the CLASSIFIED MANAGER of The Farmington Daily Times, a daily newspaper of general circulation published in English in Farmington, said county and state, and that the hereto attached LEGAL NOTICE was published in a regular and entire issue of the said Farmington Daily
Times, a daily newspaper duly quali- fied for the purpose within the
meaning of Chapter 167 of the 1937 Session Laws of the State of New
Mexico for ONE consecutive
(days) $(////)$ on the same day as follows:
First Publication SATURDAY, SEPTEMBER 4, 1993
Second Publication
Third Publication
Fourth Publication
and the cost of publication was \$ 19.99
O Salazar
On Sint 201943 O.J. Salazar appeared before me, whom I know personally to be the person who signed the above document.
Dinning Beck
Notary Public, San Juan County, New Mexico
and the second s

No. 32247A

LEGAL NOTICE

Giant Exploration & Production Company, P.O. Box 2810, Farmington, New Mexico 87499, (505) 326-3325, whose agent is Jeffery R. Vaughan hereby notifies interested parties that the following well is to be converted to a water injection well, Injection vill be into the Lower Gallup perforated interval from 4763' to 4782'. Maximum rate will be 1200 BWPD at less than 956 psi. Any request for information or objections should be filed with the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504 within 15 days.

Central Bisti Unit #29 NE/4, SE/4 Sec. 8, T25N, R12W

Legal No. 32247 published in the Farmington Daily Times, Farmington, New Mexico on Saturday, September 4, 1993.

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