STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

30-045-28467

RECEIVED
MAY 12 1995
OIL CON. DIV.
DIST. 3

ADMINISTRATIVE ORDER SWD-590

APPLICATION OF GIANT EXPLORATION & PRODUCTION COMPANY FOR SALT WATER DISPOSAL, SAN JUAN COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Giant Exploration & Production Company made application to the New Mexico Oil Conservation Division on April 19, 1995, for permission to complete for salt water disposal its **South Bisti 30L Well No.1** located 1650 feet from the South line and 850 feet from the West line (Unit L) of Section 30, Township 26 North, Range 13 West, NMPM, San Juan County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

(1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;

(2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;

(3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and

(4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant herein, is hereby authorized to complete its South Bisti 30L Well No.1 located 1650 feet from the North line and 850 feet from the East line (Unit L) of Section 30, Township 26 North, Range 13 West, NMPM, San Juan County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Gallup formation at approximately 5223 feet to 5234 through 2 3/8-inch plastic-lined tubing set in a packer located at approximately 5175 feet.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 1045 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Gallup formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Aztec district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Aztec district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of

this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 9th day of May, 1995.

WILLIAM J. LEMAY, Director

WJL/BES

xc: Oil Conservation Division - Aztec ✓
US Bureau of Land Management -Farmington

Ernie Busch

From: Ernie Busch
To: David Catanach
Subject: GIANT EXPL & PROD CO (SWD)
Date: Monday, May 08, 1995 10:56AM
Priority: High

SOUTH BISTI 30L #1
30-26N-13W
RECOMMEND: APPROVAL

U S WEST COMMUNICATIONS

NEW MEXICO STATE GOVT
ENERGY & MINERALS
BILL DATE: MAR 01, 1995
ACCOUNT NUMBER: N-505-471-5421-474M
505 E71-5421

TOTAL AMOUNT DUE	• PREVIOUS BALANCE	$580.21
	• CURRENT CHARGES DUE MAR 21	$588.91
	• TOTAL AMOUNT DUE	$1,169.12

ACCOUNT SUMMARY

• PREVIOUS CHARGES AND CREDITS

PRIOR CHARGES	580.21
ADJUSTMENTS	.00
PAYMENTS	.00
• TOTAL PREVIOUS BALANCE	$580.21

• CURRENT CHARGES DUE MAR 21, 1995

U S WEST COMMUNICATIONS	
LOCAL CHARGES	
If you have questions, call 1-505-765-3661	588.91
• TOTAL CURRENT CHARGES	$588.91
• TOTAL AMOUNT DUE	$1,169.12

We appreciate your business

** Any amount left unpaid 30 days after bill date is subject to a 1.5% late payment charge. **

Please fold on the perforation above, detach and return with your payment payable to U S WEST Communications

Enter Amount Paid (If different from amount due)

_____

ENERGY AND MINERALS DEPARTMENT

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ 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, NM 87499

Contact party: Gregory McIntosh Phone: (505) 326-3325

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 ☒ 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 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/l or less) overlying the proposed injection zone as well as any such source 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.

Name: Paul R. Williams Title Area Engineer

Signature: Paul R. Williams Date: 4/17/95

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance 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 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, P. O. Box 2088, Santa Fe, New Mexico 87501 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 for Disposal
Form C-108 Supplemental Information

South Bisti 30L Well No. 1
NW/4, SW/4, Section 30, T26N, R13W
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 attached as follows:

South Bisti 30N Well No. 1
Elliott Well No. 2

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 1025-1045 psi range. Maximum injection pressure will be 1045 psi.

4. Water injected is previously produced water from the Gallup Formation.

5. This well will be used for salt water disposal (analysis of water to be disposed of is attached).

VIII. The injection zone is the First South Bisti Sand of the Lower Gallup sandstone. This zone is to be 34' in thickness with a top of 5200' 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.

GIANT

GIANT EXPLORATION &
PRODUCTION COMPANY

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

	FAX
505	505
326-3325	327-7987

April 17, 1995

Mr. Frank Chavez
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Subject: South Bisti 30L Well No. 1
1650' FSL, 1850' FWL
Sec. 30, T26N, R13W
San Juan County, New Mexico

Dear Mr. Chavez:

Enclosed for your information is our Application for Authorization to Inject for the above referenced well. The Original Application has been sent to the New Mexico Oil Conservation Division in Santa Fe for approval.

Sincerely,

Diane G. Jaramillo
Production/Regulatory Manager

DGJ/klb

Enclosure

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 will be used for salt water disposal. No known faults or other hydrologic connection exist.

XIII. A copy of this application has been sent by certified mail to the following:

United States Department of Interior
Bureau of Land Management
Farmington District Office
1235 La Plata Highway
Farmington, New Mexico 87401

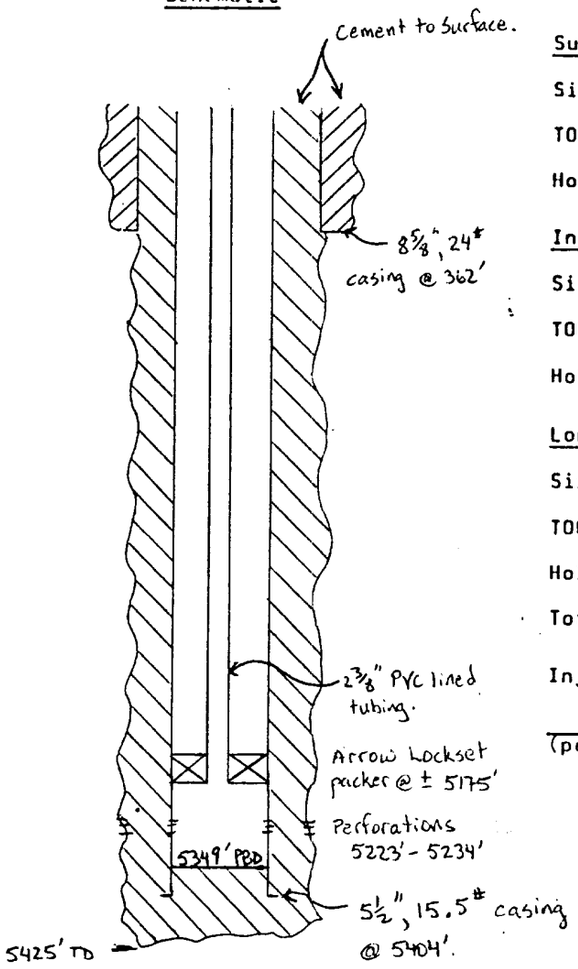
There are no offset leasehold operators within one-half mile of the well location.

XIV. Certification shown on Application.

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Giant Exploration & Production Company	South Bisti 30L			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
1	1650' FSL, 850' FWL	30	26N	13W

Schematic



Tabular Data

Surface Casing

Size 8-5/8 " Cemented with 230 sx.

TOC surface feet determined by circulation

Hole size 12-1/4"

Intermediate Casing

Size N/A " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5-1/2 " Cemented with 700 sx.

TOC surface feet determined by circulation

Hole size 7-7/8"

Total depth 5425'

Injection interval

5223' feet to 5234' feet (perforated)

(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with PVC (material) set in a

Arrow Lockset (brand and model) packer at ± 5175 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Gallup

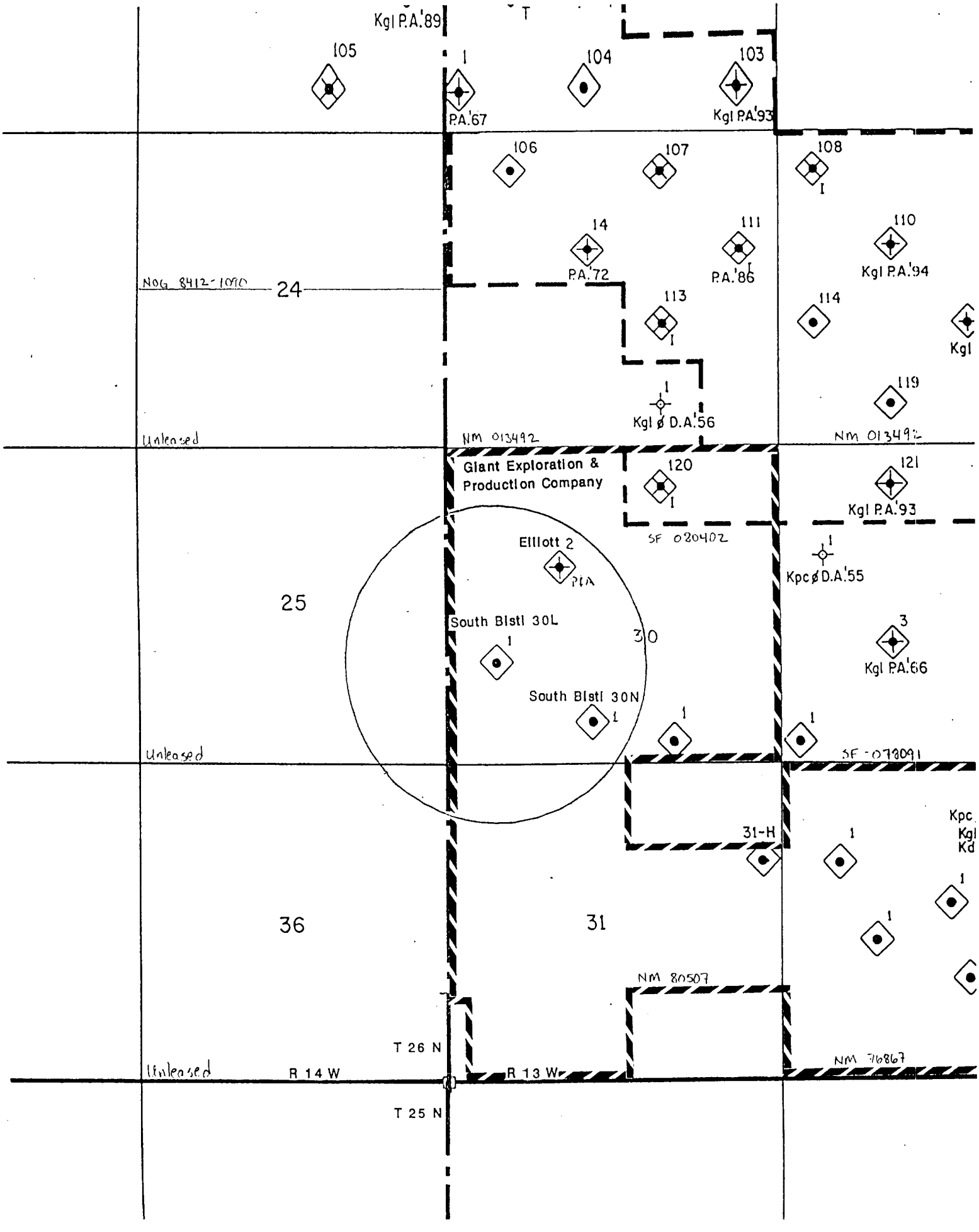
2. Name of Field or Pool (if applicable) Bisti Lower Gallup

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? Developmental Well

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No.

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Pictured Cliffs - 3648' above.


Kgl P.A.'89
105
1
P.A.'67
104
103
Kgl P.A.'93
106
107
108
I
14
P.A.'72
111
P.A.'86
110
Kgl P.A.'94
NOG 8412-1090
24
113
I
114
Kgl
1
Kgl ø D.A.'56
119
Unleased
NM 013492
NM 013492
Giant Exploration &
Production Company
120
I
121
Kgl P.A.'93
SF 020402
Elliott 2
PIA
1
Kpc ø D.A.'55
25
South Bistl 30L
1
30
3
Kgl P.A.'66
South Bistl 30N
1
1
1
Unleased
SF-078091
Kpc
Kgl
Kd
31-H
1
1
1
36
31
NM 80507
T 26 N
Unleased
R 14 W
R 13 W
NM 76867
T 25 N

WELL DATA SHEET

Well Name:	South Bisti 30N #1
Legal Description:	660' FSL, 2520' FWL Sec. 30, T26N, R13W San Juan County, New Mexico
Well Type:	Oil Well
Spud Date:	6/21/90
Surface Casing Hole Size:	12-1/4"
Surface Casing Size:	8-5/8"
Surface Casing Depth:	362'
Cementing Record:	220 sks
Production Casing Hole Size:	7-7/8"
Production Casing Size:	5-1/2"
Production Casing Depth:	5369'
Cementing Record:	700 sks
Perforation:	5210'-5222'
Plug Back Depth:	5316'
Total Depth:	5375'

Giant Exploration & Production Company

Well Bore Diagram

WELL NAME Elliott Well No. 2

LOCATION 1980' FNL, 2520' FWL (SE/4 NW/4) **SECTION** 30 **T** 26 N **R** 13 W.

COUNTY San Juan **STATE** New Mexico

GLE 6512'

KBE

DF

SURFACE CASING

Hole Size: 13-3/4"
Casing: 10-3/4", 32.75#
Casing Set @ 187' with 200 sks cement.

FORMATION TOPS

Kirtland-Fruitland	455'
Farmington	1074'
Pictured Cliffs	1643'
Lewis	1782'
Cliffhouse	2574'
Point Lookout	4877'
Mancos	5001'
Gallup	5255'

CEMENT TOP 4450' (by calc.)

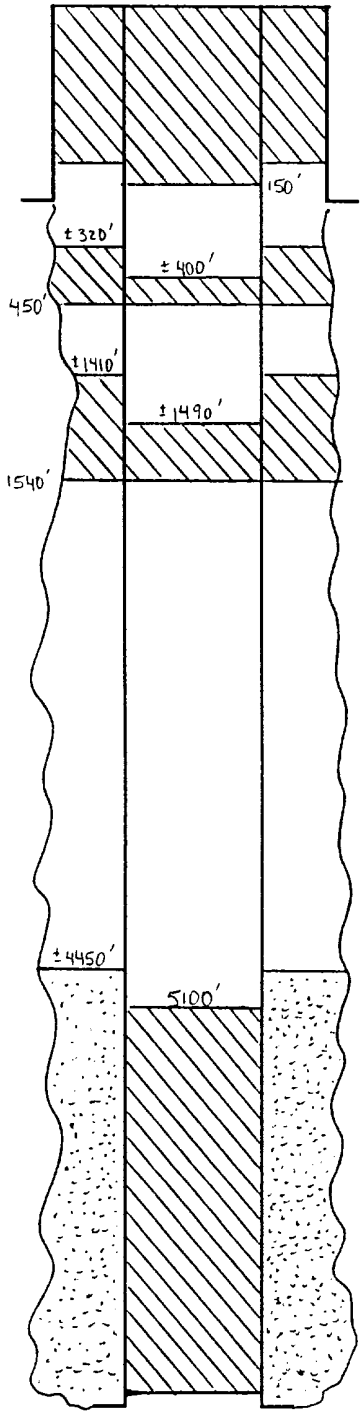
PERFORATIONS

5263'-97'

PBD 5359'

PRODUCTION CASING

Hole Size: 8-3/4"
Casing: 5-1/2", 15.5#
Casing Set @ 5359' with 200 sks cement.



WELL HISTORY

Spud date: 6/23/56

Original owner: CM&W Drilling Co.

IP 7/25/56 BOPD 20 BWPD -

MCFD GOR

Completion Treatment:
Well was frac'd.

CURRENT DATA

Pumping Unit
Tubing
Pump Size
Rod string
Remarks

Well was P&A's as follows:
(Has steel plate 4' below GR)
Plug #1: 5100' to 5359'
Shot 4 holes at 1540'.
Plug #2: Squeezed 35 sks into holes at 1540'. Left 50' of cement in casing.
Shot 4 holes at 450'.
Plug #3: Squeezed 35 sks into holes at 450'. Left 50' of cement in casing.
Plug #4: 10 sks cement from surface to 150'.
Pumped 40 sks down surface casing. (P&A'd 11/78).

Date Last Revised: 3/27/95

ANALYSIS NO. 01-06-91

API FORM 45-1

FIELD RECEIPT NO. _____

API WATER ANALYSIS REPORT FORM

Company		Sample No.	Date Sampled
Giant			01-17-90
Field	**Legal Description**	**County or Parish**	**State**
	33 T26N R13W	San Juan	NM
Lease or Unit	**Well**	**Depth**	**Formation**	**Water, B/D**
South Bisti	30-N		Gallup	
Type of Water (Produced, Supply, etc.)	**Sampling Point**	**Sampled By**	

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na (calc.)	18544	806.24
Calcium, Ca	822	41.00
Magnesium, Mg	182	15.09
Barium, Ba	—	—
Potassium, K^+	90	2.30

ANIONS

Chloride, Cl	30348	856.06
Sulfate, SO_4	0	0
Carbonate, CO_3	0	0
Bicarbonate, HCO_3	517	8.48
OH	0	0

Total Dissolved Solids (calc.) 50,503

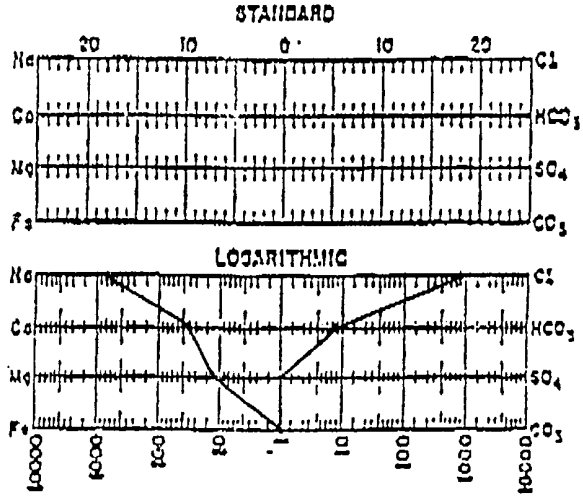
Iron, Fe (total) # /## 10.0 ppm

Sulfide, as H_2S neg

OTHER PROPERTIES

pH	6.86
Specific Gravity, 60/60 F.	1.038
Resistivity (ohm-meters) 76 F.	.135
Total hardness	2800

WATER PATTERNS — me/l



REMARKS & RECOMMENDATIONS:

ANALYST: Lee

THE WESTERN COMPANY OF
NORTH AMERICA, FARMINGTON, NM
(505) 327-6222

Please refer any questions to: BRIAN AULT, District Engineer