

Hixon Development Company

DEC 15 1989 AM 8 41

December 15, 1989

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

Subject: South Bisti Well No. 1  
660' FSL, 660' FEL  
Sec. 3, T25N, R13W  
San Juan County, New Mexico

*OK as per  
Hixon  
1-18-90*

Dear Sir:

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

Very truly yours,

*Bruce E. Delventhal*

Bruce E. Delventhal  
Vice President - Operations

BED/das

Enclosures

# APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Hixon Development Company  
Address: P.O. box 2810, Farmington, New Mexico 87499  
Contact party: Bruce E. Delventhal 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: Bruce E. Delventhal Title Vice President - Operations  
Signature: Bruce E. Delventhal Date: December 15, 1989
- \* 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.

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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.

Hixon Development Company  
Application for Authorization for Disposal  
Form C-108 Supplemental Information

South Bisti Well No. 1  
SE/4, SE/4, Section 3, T25N, 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:
  - Salge Well No. 4-A
  - Bisti St. Com. Well No. 1
  - Champlin Fed. Well No. 1
  - Champlin Fed. Well No. 3
- 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 814-989 psi range. Maximum injection pressure will be 989 psi.
  - 4. Water injected is previously produced water from the Gallup Formation.
  - 5. This well will be used for salt water disposal.
- VIII. The injection zone is the Lower Gallup sandstone. This zone is to be 120' in thickness with a top of 4830' 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.

Application for Authorization for Disposal  
Page 2

- 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.
- XIII. A copy of this application has been sent by certified mail to the following leasehold operators:
  - Dugan Production Corp.  
P.O. Box 420  
Farmington, N.M. 87499
  - Hicks Oil & Gas, Inc.  
P.O. Drawer 3307  
Farmington, N.M. 87499
  - Southern Union Exploration  
324 Highway US 64, NBU 3001  
Farmington, N.M. 87401
- XIV. Certification shown on Application.

WELL DATA SHEET

Well Name: South Bisti Well #1

Legal Description: 660' FSL, 660' FEL  
Sec. 3, T25N, R13W  
San Juan County, NM

Well Type: Oil Well

Spud Date: 05-17-83

Surface Casing Hole Size: 12-1/4"  
Surface Casing Size: 8-5/8"  
Surface Casing Depth: 337'

Cementing Record: 277 cu. ft.

Production Casing Hole Size: 7-7/8"  
Production Casing Size: 5-1/2"  
Production Casing Depth: 5044'

Cementing Record: 1154 cu. ft.

Perforations: 4937' - 4947'

Plug Back Depth: 5004'

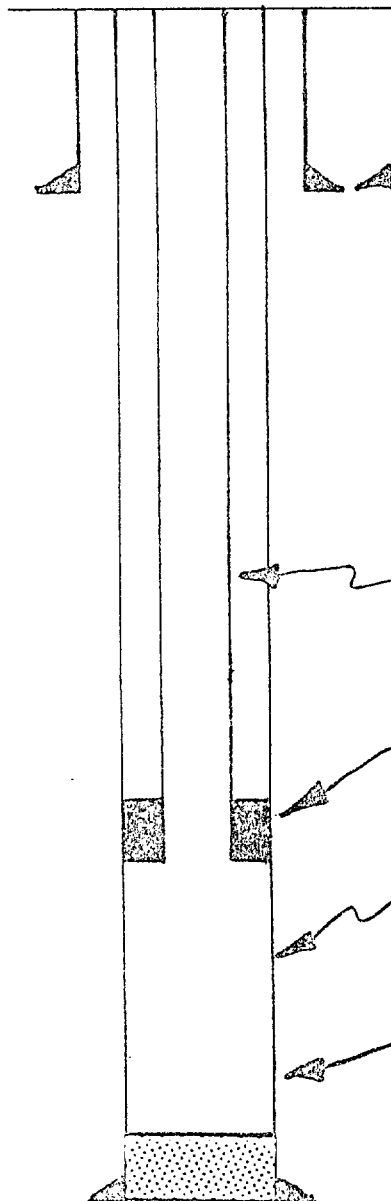
Total Depth: 5050'

Hixon Development Company

Water Injection Schematic

Well Name: South Bisti Well #1

Legal Location: 660' FSL, 660' FEL  
Sec. 3, T25N, R13W  
San Juan County, N.M.



*12 1/4" / 146  
24229 #/ft<sup>3</sup>  
= 277 x 24229 =  
671' cement circ.*

Surface Casing:  
8-5/8" casing set at 337' with  
277 cu. ft. of cement

*7 7/8" / 146  
5.7715 #/ft<sup>3</sup>  
= 1154 x 5.7715 =  
6660' cement circ.  
ck*

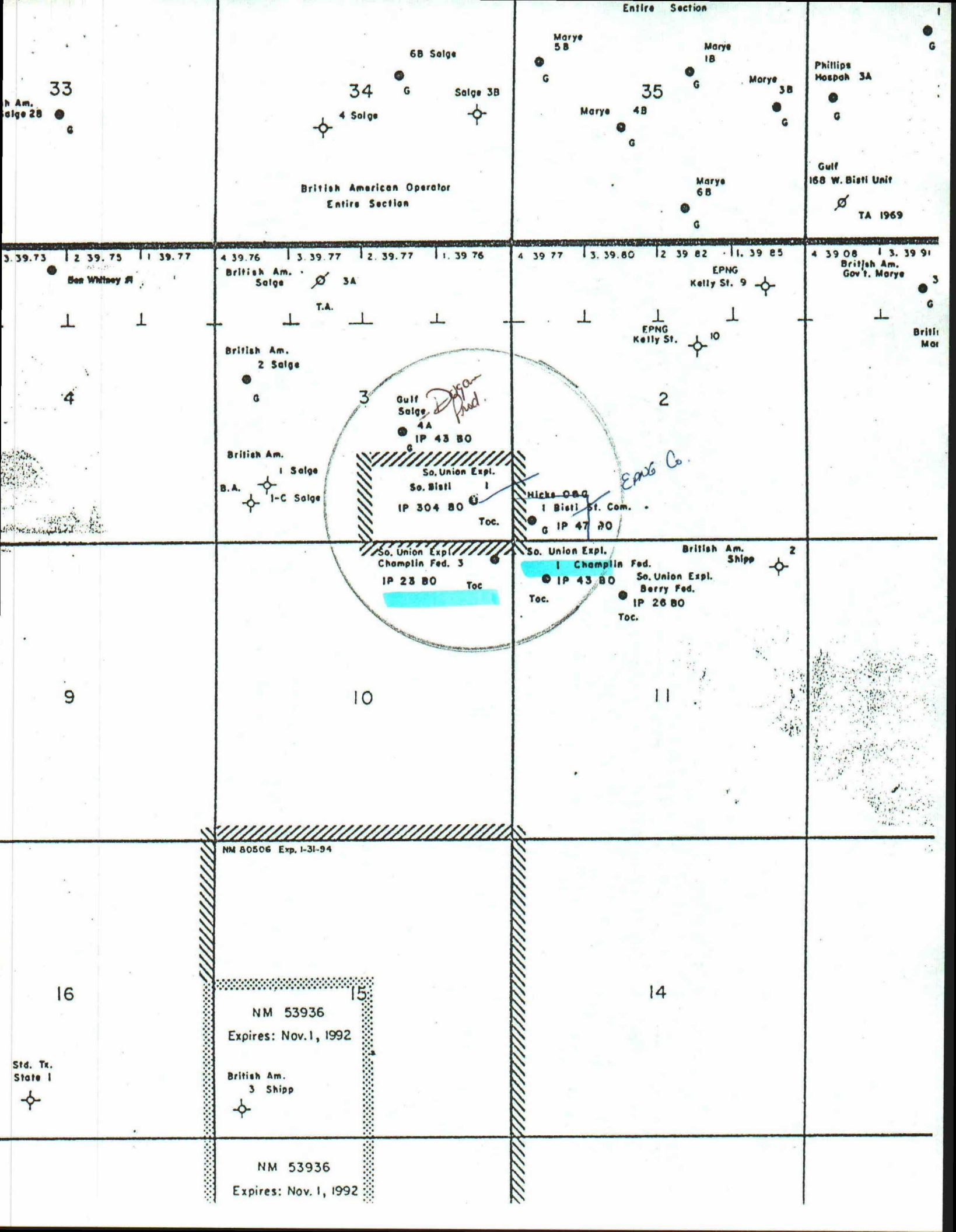
Tubing:  
2-7/8" tubing set at 4730'

Packer:  
Baker Model "AD-1" Packer  
set at 4730'

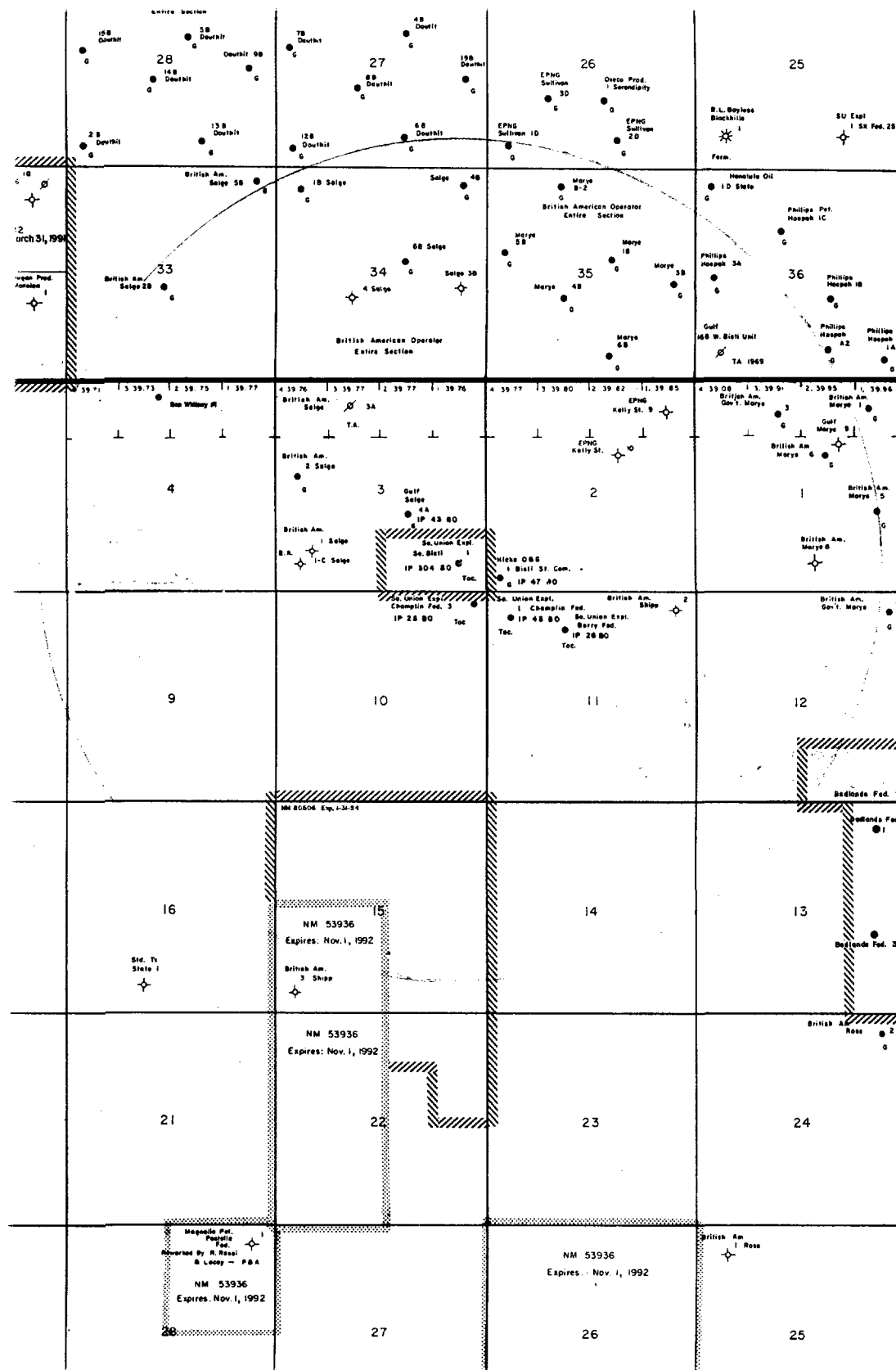
Perforations:  
4937' - 4947'

TD: 5050' PBD: 5004'

Production Casing:  
5-1/2" casing set at 5044'  
with 1154 cu. ft. of cement







Hixon Development Company, P.O. Box 2810, Farmington, New Mexico 87499, (505) 326-3325, whose agent is Aldrich L. Kuchera, hereby notifies interested parties that the following well is to be converted to a water disposal well. Maximum rate will be 1200 BWPD at less than 989 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 87501 within 15 days.

South Bisti Well No. 1  
SE/4, SE/4, Section 3, T25N, R13W  
San Juan County, New Mexico

WELL DATA SHEET

Well Name:	Salge Fed. A Well #4
Legal Description:	1980' FEL, 1980' FSL Sec. 3, T25N, R13W San Juan County, NM
Well Type:	Oil Well
Spud Date:	12-27-83
Surface Casing Hole Size:	12-1/4"
Surface Casing Size:	8-5/8"
Surface Casing Depth:	320'
Cementing Record:	265 cu. ft.
Production Casing Hole Size:	7-7/8"
Production Casing Size:	5-1/2"
Production Casing Depth:	5199'
Cementing Record:	2164 cu. ft.
Perforations:	4982' - 4988' 5001' - 5007' 5020' - 5026'
Plug Back Depth:	5154'
Total Depth:	5200'

WELL DATA SHEET

Well Name: Bisti State Com. #1

Legal Description: 330' FSL, 330' FWL  
Sec. 2, T25N, R13W  
San Juan County, NM

Well Type: Oil Well

Spud Date: 01-30-84

Surface Casing Hole Size: 12-1/4"  
Surface Casing Size: 8-5/8"  
Surface Casing Depth: 225'

Cementing Record: 160 sks.

Production Casing Hole Size: 7-7/8"  
Production Casing Size: 4-1/2"  
Production Casing Depth: 5039'

Cementing Record: 650 sks.

Perforations: 4911' - 4917'  
4932' - 4940'

Plug Back Depth: 5006'

Total Depth: 5050'

WELL DATA SHEET

Well Name:	Champlin Federal Well #1
Legal Description:	660' FNL, 660' FWL Sec. 11, T25N, R13W San Juan County, NM
Well Type:	Oil Well
Spud Date:	08-26-83
Surface Casing Hole Size:	12-1/4"
Surface Casing Size:	8-5/8"
Surface Casing Depth:	296'
Cementing Record:	265 cu. ft.
Production Casing Hole Size:	7-7/8"
Production Casing Size:	5-1/2"
Production Casing Depth:	5025'
Cementing Record:	1233 cu. ft.
Perforations:	4906' - 4916' 4908' - 4914'
Plug Back Depth:	5004'
Total Depth:	5025'

WELL DATA SHEET

Well Name:	Champlin Federal Well #3
Legal Description:	330' FNL, 330' FEL Sec. 10, T25N, R13W San Juan County, NM
Well Type:	Oil Well
Spud Date:	01-09-84
Surface Casing Hole Size:	14-3/4"
Surface Casing Size:	10-3/4"
Surface Casing Depth:	266'
Cementing Record:	325 cu. ft.
Intermediate Casing Hole Size:	9-7/8"
Intermediate Casing Size:	7-5/8"
Intermediate Casing Depth:	1564'
Cementing Record:	295 cu. ft.
Production Casing Hole Size:	6-3/4"
Production Casing Size:	4-1/2"
Production Casing Depth:	5050'
Cementing Record:	230 cu. ft.
Perforations:	4912' - 4921' 4938' - 4947' 4954' - 4961'
Plug Back Depth:	5013'
Total Depth:	5050'



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE

RECEIVED  
DEC 21 AM 10 19

ARREY CARRUTHERS  
GOVERNOR

1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6178

Date: 12-20-89

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504-2088

Re: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed SWD X \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated 12-19-89  
for the HIXON DEVELOPMENT CO. South Bisti #1  
Operator Lease & Well No.

P-3-25N-13W and my recommendations are as follows:  
Unit, S-T-R

Approve - MIT MUST BE WITNESSED

Yours truly,

Frank Buehl

OIL CO. Hixon Development Company  
RECEIVED

'90 JAN 25 AM 9 03

February 23, 1990

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

Subject: Application for Authorization for Disposal  
South Bisti Well No. 1  
660' FSL, 660' FEL  
Sec. 3, T25N, R13W  
San Juan County, New Mexico

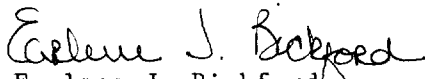
Dear Mr. Catanach:

Pursuant to our recent telephone conversation regarding the above referenced application for a water disposal well, please accept this letter as notice that a copy of said application has been mailed to El Paso Natural Gas Company at P.O. Box 1492, El Paso, Texas 79978, as we have found them to be an additional offset leaseholder.

Upon receipt, the Affidavit of Publication for the revised legal notice will be forwarded to your office.

Please do not hesitate to contact me if you have any additional questions regarding this matter.

Very truly yours,

  
Earlene J. Bickford  
Administrative Manager

EJB/das



# Hixon Development Company

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OIL & GAS DIVISION  
RECEIVED

'90 JAN 5 AM 9 08

January 3, 1990

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

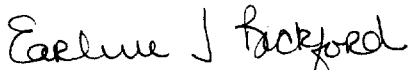
Subject: Affidavits of Publication  
South Bisti Well No. 1  
660' FSL, 660' FEL  
Sec. 3, T25N, R13W  
San Juan County, New Mexico

Dear Sir:

Enclosed herewith please find the original Affidavit of Publication on the above-referenced well. We forwarded the Application for Authorization for Disposal to your office on December 15, 1989.

Thank you.

Very truly yours,



Earlene J. Bickford  
Administrative Manager

EJB/das

Enclosures

# AFFIDAVIT OF PUBLICATION

No. 24562

STATE OF NEW MEXICO,  
County of San Juan:

Betty Shipp being duly  
sworn, says: That he is the National Ad Manager of  
THE FARMINGTON 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 FARMINGTON DAILY  
TIMES, a daily newspaper duly qualified for the purpose within the  
meaning of Chapter 167 of the 1937 Session Laws of the State of New  
Mexico for One consecutive (days) (weeks) on the same day as  
follows:

First Publication Wednesday, December 20, 1989

Second Publication \_\_\_\_\_

Third Publication \_\_\_\_\_

Fourth Publication \_\_\_\_\_

and that payment therefor in the amount of \$6.55  
has been made.

Betty Shipp

Subscribed and sworn to before me this 20th day  
of December, 1989.

J. Shorter  
NOTARY PUBLIC, SAN JUAN COUNTY, NEW MEXICO

My Commission expires: June 23, 1990

## Copy of Publication

### NOTICE

Hixon Development Company,  
P.O. Box 2810, Farmington, New  
Mexico 87499, (505) 326-3825  
whose agent is Aldrich L. Kuchera  
hereby notifies interested parties  
that the following well is to be con-  
verted to a water disposal well.  
Maximum rate will be 1200 BWPD  
at less than 989 psi. Any request  
for information or objections  
should be filed with the Oil Con-  
servation Division, State Land Of-  
fice Building, PO Box 2088, Santa  
Fe, New Mexico 87501 within 15  
days.  
South Dist. Well No. 1, SE/4 SE/4,  
Section 3, T25N, R13W, San Juan  
County, New Mexico.  
Legal No. 24562 published in  
the Farmington Daily Times, Farm-  
ington, New Mexico on Wednes-  
day, December 20, 1989.

Division  
Hixon Development Company

1990 FEB 9 AM 8 47

February 8, 1990

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

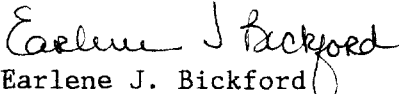
Subject: Affidavits of Publication  
South Bisti Well No. 1  
660' FSL, 660' FEL  
Sec. 3, T25N, R13W  
San Juan County, New Mexico

Dear Sir:

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Thank you.

Very truly yours,

  
Earlene J. Bickford  
Administrative Manager

EJB/das

Enclosures

# AFFIDAVIT OF PUBLICATION

No. 24703

STATE OF NEW MEXICO,  
County of San Juan:

Betty Shipp being duly  
sworn, says: That he is the National Ad Manager of

THE FARMINGTON 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 FARMINGTON DAILY  
TIMES, a daily newspaper duly qualified for the purpose within the  
meaning of Chapter 167 of the 1937 Session Laws of the State of New  
Mexico for One consecutive (days) (weeks) on the same day as  
follows:

First Publication Thursday, January 25, 1990

Second Publication \_\_\_\_\_

Third Publication \_\_\_\_\_

Fourth Publication \_\_\_\_\_

and that payment therefor in the amount of \$7.12  
has been made.

Betty Shipp

Subscribed and sworn to before me this 25th day  
of January, 1990.

J. Shorter

NOTARY PUBLIC, SAN JUAN COUNTY, NEW MEXICO

My Commission expires: June 23, 1990

## Copy of Publication

### NOTICE

Hixon Development Company,  
P.O. Box 2810, Farmington, New  
Mexico 87499, (505) 326-3325  
whose agent is Aldrich L. Kuchera,  
hereby notifies interested parties  
that the following well is to be con-  
verted to a water disposal well.  
Injection will be into the Lower  
Gallup perforated interval from  
4937' - 4947'. Maximum rate will  
be 1200 BWPD at less than 989  
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  
87501 within 15 days.  
South Bisti Well No. 1, SE/4 SE/4,  
Section 3, T25N, R22W, San Juan  
County, New Mexico  
Legal No. 24703 published in  
the Farmington Daily Times, Farm-  
ington, New Mexico on Thursday,  
January 25, 1990.