

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no
- II. Operator: Amoco Production Company
Address: P.O. Box 800 Denver CO
Contact party: Brooke Bell Phone: (303) 830-5341
- 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: Karen S. Dawson Title: Division Operations Engineer
Signature: [Signature] Date: 11/9/89
- * 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.

III. A. See Injection Well Data Sheet

B. 1. Names of injection formations are Morrison, Bluff and Entrada.

(no field or pool name for these formations.)

2. The 7450' - 8300' injection intervals will be selected from logs run at total depth. Intervals will be perforated with 4 spf.

3. This well will be drilled for the purpose of injection for water disposal.

4. No remedial cement work anticipated.

5. The Dakota formation, top 7083', is the next higher formation known to produce gas in this area; there is no known lower oil or gas producing formation.

VI. No wells within the area of review penetrate the proposed injection zone.

VII. 1. Rate of disposal will be determined by a step rate injection test. The primary use of the facility will be for disposal of produced water from area Fruitland coal development wells. The amount of water to be injected will depend on this development.

2. The proposed injection system will be designed as a closed system.

3. Maximum injection pressure will be determined by a step rate injection test. Average injection pressure will be kept below this maximum pressure.

4. Area Fruitland Coal Wells

		Na	Ca	Mg	K	Cl	HCO ₃	So ₄	CO ₃	TDS
Kernaghan	B-6	6130	34	35	-	1380	14150	33	0	21760
Kernaghan	B-7	6320	37	44	17	794	15750	0	0	23000
Florance	K-3	6530	48	41	-	1524	15048	0	0	23200
Moore	A-8	5300	34	29	-	1170	12300	33	0	18870

Gartner SWD No. 1

The above listed wells and the analyses of produced water are indicative of the water that will be injected into the Gartner No. 1.

Compatibility - Attached is a copy of the results of an Amoco scaling tendency program which supports the source water is compatible with the injection zone water.

5. Attached are analyses of water samples from the Blackwood Nichols NEBU # 501, NW 1/4, Section 20, T30N, R7W, Rio Arriba County, New Mexico.

VIII. The closest overlying aquifers are the Ojo Alamo, Animas, San Jose, and Nacimiento. The Ojo Alamo should be encountered in this well from 1523' to 1673'. There are no known aquifers below the Entrada.

The proposed injection zones are the sandy and porous portions of the Morrison, Bluff, and Entrada formations. At the proposed Gartner SWD #1 location the zones could be described as follows:

Morrison - light gray to gray, fine grained to medium grained, well rounded and slightly calcareous sandstones. Individual sandstone bodies are expected to be 10-50' thick separated by shales and siltstones. Some sandstones may be slightly arkosic, but generally are quartzitic with some friable sands. Overall depth is estimated at 7453' - 7850' with overlying unit being Burro Canyon and the underlying unit being type Bluff member. A possible thickness of 400' sand is anticipated.

Bluff - light red to pink to gray, fine grained to medium grained sandstones. Clean, slightly friable, sorted. Individual sandstones are expected to be 10' - 20' thick and separated by shales and siltstones. Overall depth of zone is estimated at 7850'-8150' with approximately 300' of porous sandstone. Rests on top of Todilto.

Entrada - gray to white, hard, fine to medium grained sandstone. Well sorted and well-rounded. Depth of zone is estimated at 8150'-8400' with the upper 250' being porous sandstone. Rests on Chinle.

Gartner SWD No. 1

- IX. Stimulation will consist of perforating selected porous intervals in the Morrison, Bluff, and Entrada and stimulating using a sand water frac treatment. Details will be provided to the District NMOCD office prior to stimulation.
- X. Test information and logs will be provided to the District NMOCD office as available.
- XI. A search of state records with the State Engineers office revealed one well, Gartner #5, used for industrial purposes operated by Meridian Oil. The well depth is 534' and is temporarily abandoned. A field search revealed a fresh water well within the area of review. A location map and water analysis are attached.
- XII. I hereby certify that I have examined available geologic and engineering data and can find no evidence of connection between the disposal zone and underground drinking water sources.
- XIII. Proof of notice.

11/9/89
Date

Brooke S. Bell
Brooke S. Bell
Operations Engineer

INJECTION WELL DATA SHEET

Amoco Production Company
Operator

Gartner SWD
Lease

1 1330' FSL X 1870' FWL
Well No. Footage Location

26
Section

30 North
Township

8 West
Range

San Juan County, New Mexico

Schematic

Tabular Data

Surface Casing

Size 20 " Cemented with 640 sx.TOC surface feet determined by circulationHole size 26"

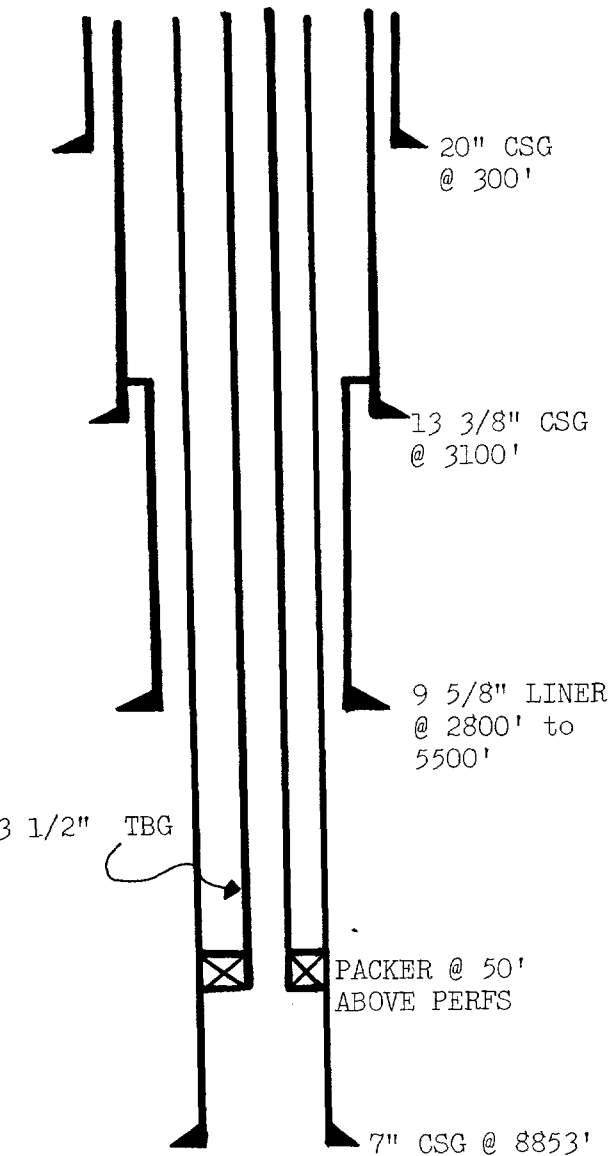
Intermediate Casing

Size 13 3/8 " Cemented with 1800 sx.TOC surface feet determined by circulationHole size 17 1/2"

Long String

Size 7" " Cemented with 700 sx.TOC 5000 feet determined by bond logHole size 8 3/4"Total depth 8853'Injection interval
(will perforate selected intervals)7450 feet to 8300 feet

Liner

Size 9 5/8" " Cemented with 1000 sx.TOC 2800 feet determined by circulationHole size 12 1/4"Total depth 2800'-5500'

Tubing size 3 1/2" lined with _____ set in a
(material)
_____ packer at 7400 (approx.) feet
(brand and model)
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Morrison, Bluff and Entrada
- Name of Field or Pool (if applicable) NA
- Is this a new well drilled for injection? ☒ Yes ☐ No
If no, for what purpose was the well originally drilled? _____
- Has the well ever been perforated in any other zone(s)? List all such intervals and give plugging detail (sacks or cement or bridge plug(s) used). No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.
2368' Fruitland; 2778' Pictured Cliffs; 4477' Mesaverde; 7083' Dakota

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75 SUTILE STREET

ATTEN: L. CLARK

DATE SAMPLED: 8/1/88

ATTACHMENT VII 5.

PO BOX 2605

PO BOX 1237

WELL NAME: NEBU UNIT 501

DURANGO, CO 81302

DURANGO, CO 81302

LOCATION:

(303) 247-4220

(303) 247-0728

FORMATION: ENTRADA WATER

SAMPLED FROM:

CDS ID #: 1119

WELL ON/OFF:

CONSTITUENT	ppm	epm
Sodium Na +	4760	207.1
Potassium K +	169	4.3
Calcium Ca ++	1310	65.4
Magnesium Mg ++	29.4	2.4
Iron Total Fe++ & Fe+++	164	8.8

Item 2A
SWD-339

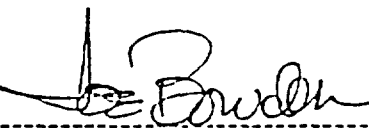
POSITIVE SUB-TOTAL 6432.4 287.9779

Chloride Cl -	8280	233.5
Carbonate CO3 =	0	0.0
Bicarbonate HCO3-	152	2.5
Hydroxide OH -	0	0.0
Sulfate SO4 =	2100	43.7

NEGATIVE SUB-TOTAL 10532 279.70928

Total Dissolved Solids 19000 ppm.
pH 5.07 units
Specific Gravity 1.01 @ 73 F.
Resistivity 45 ohm-cm

APPROVED BY:



DR. JOE BOWDEN, DIRECTOR

This Laboratory report may not be published or used for advertising or in connection with advertising of any kind without prior written permission from CDS Laboratories.
Results are based on analysis made at the time samples are received at the laboratory.

75 SUTILE STREET
PO BOX 2605
DURANGO, CO 81302
(303) 247-4220

ATTEN: J. L. CLARK
PO BOX 1237
DURANGO, CO 81302
(303) 247-0728

DATE SAMPLED: 8/1/88
WELL NAME: NEBU UNIT 501
LOCATION:
FORMATION: MORRISON PERFS.
SAMPLED FROM:
WELL ON/OFF:

CDS ID #: 1120

CONSTITUENT		ppm	epm
Sodium	Na +	10600	461.1
Potassium	K +	1810	46.3
Calcium	Ca ++	685	34.2
Magnesium	Mg ++	65.9	5.4
Iron Total	Fe++ & Fe+++	230	12.4

Item 3A
SWD-339

POSITIVE SUB-TOTAL 13390.9 557.3565

Chloride	Cl -	18200	513.2
Carbonate	CO3 =	0	0.0
Bicarbonate	HCO3-	537	8.8
Hydroxide	OH -	0	0.0
Sulfate	SO4 =	1750	36.4

NEGATIVE SUB-TOTAL 20487 558.47643

Total Dissolved Solids 35100 ppm
pH 6.71 units
Specific Gravity 1.023 @ 73 F.
Resistivity 24 ohm-cm

APPROVED BY:



DR. JOE BOWDEN, DIRECTOR

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4 SCALE PREDICTIONS, MIXTURE NO. 1: 90.0 PERCENT FRUITLAND
5.0 PERCENT ENTRADA
5.0 PERCENT MORRISON

CALCULATED COMPOSITION OF MIXTURE NO. 1 IN MG/L:

(NA) = 4810. (CL) = 2123.
(CA) = 136. (SO4) = 192.
(MG) = 31. (HCO3) = 9697.
(BA) = 0. (CO3) = 0.
(SR) = 0. PH = 6.3

MOLAL IONIC STRENGTH = 0.229
SPECIFIC GRAVITY = 1.012

SCALING TENDENCIES(MG/L):

TEMP(F)	P(PSI)	CO2(PSI)	CASO4	BASO4	SRSO4	CACO3
80.	4000.0	0.000	-4515.	0.	-335.	292.
110.	4000.0	0.000	-3342.	-1.	-354.	301.
140.	4000.0	0.000	-2544.	-1.	-297.	309.
170.	4000.0	0.000	-1964.	-1.	-141.	316.
200.	4000.0	0.000	-1521.	-1.	-82.	321.

SCALE INDEX = ANALYZED CONCENTRATION - EQUILIBRIUM SOLUBILITY

A POSITIVE SCALE INDEX INDICATES SCALE PRECIPITATION CAN OCCUR WITH
THE MAGNITUDE OF THE SCALE INDEX INDICATING THE MAXIMUM AMOUNT WHICH
COULD PRECIPITATE. A NEGATIVE SCALE INDEX INDICATES THE WATER IS
UNSATURATED AND NO SCALE PRECIPITATION WILL OCCUR.

API WATER ANALYSIS REPORT FORM

Laboratory No. 2503-2015

Company <i>Amoco Production</i>		Sample No.		Date Sampled	
Field		Legal Description		County or Parish	
Lease or Unit <i>Private Wtr. Well - Near Gartner SWA #1</i>		Depth		Formation	
Type of Water (Produced, Supply, etc.) <i>Supply</i>		Well		Water, B/D	
		Sampling Point		Sampled By <i>B. Shaw</i>	

DISSOLVED SOLIDS

CATIONS	mg/l	me/l	OTHER PROPERTIES
Sodium, Na (calc.)	133	5.8	pH <i>6.62</i>
Calcium, Ca	3	.2	Specific Gravity, 60/60 F. <i>1.002</i>
Magnesium, Mg	1	.1	Resistivity (ohm-meters) <i>122</i>
Barium, Ba			

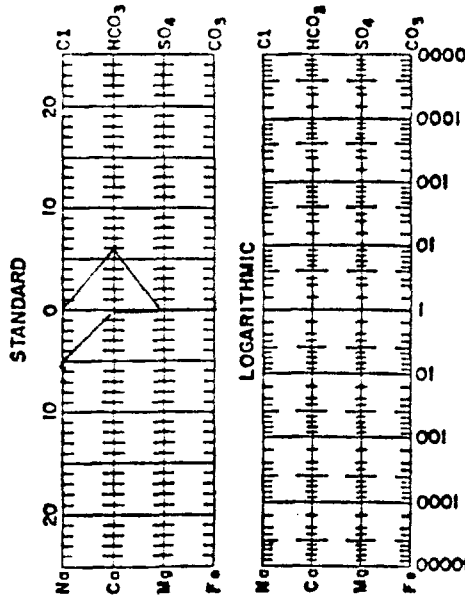
ANIONS

Chloride, Cl	6	.2
Sulfate, So ₄	0	0
Carbonate, CO ₃	0	0
Bicarbonate, HCO ₃	357	5.9

Total Dissolved Solids (calc.)

Iron, Fe (total)	501
Sulfide, as H ₂ S	0

WATER PATTERNS — me/l



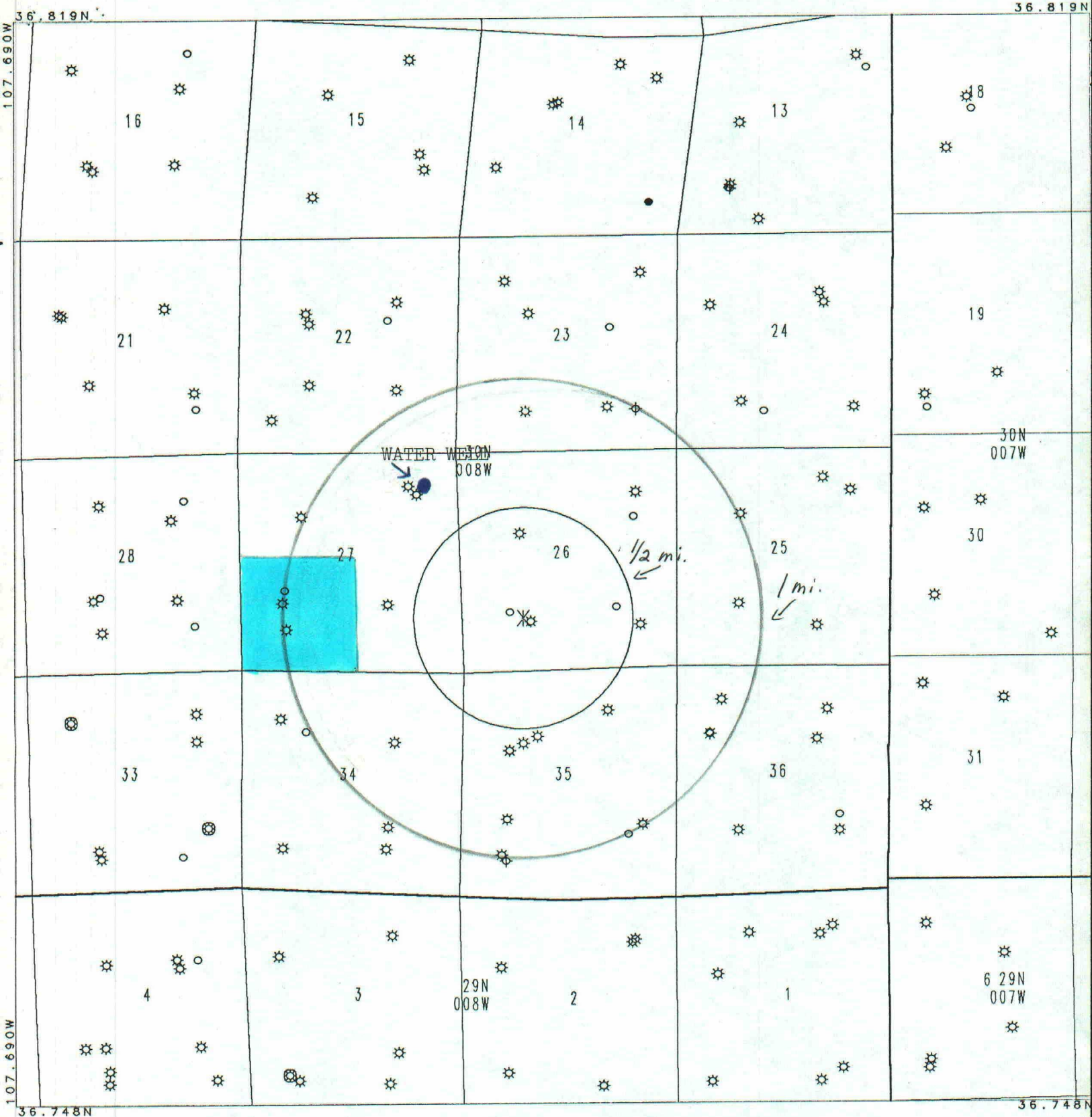
REMARKS & RECOMMENDATIONS:

Sh. B. Shaw

Date Received <i>7/25/89</i>	Preserved	Date Analyzed <i>7/25/89</i>	Analyzed By <i>DRH</i>
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TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311



AMOCO PRODUCTION COMPANY
Sec 26 - T30N - R8W
San Juan County
New Mexico
SCALE= 2,640 FEET/INCH JUL 25, 1989

AFFIDAVIT OF PUBLICATION

No. 24217STATE 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, September 27, 1989

Second Publication _____

Third Publication _____

Fourth Publication _____

and that payment therefor in the amount of \$ 11.68
has been made.

Betty Shipp

Subscribed and sworn to before me this 27th day
of September, 1989.

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

My Commission expires: June 23, 1990

Copy of Publication

NOTICE

Notice is hereby given that Amoco Production Company, 2325 E. 30th St., Farmington, New Mexico 87401, 505-325-8841, Attn. Buddy Shaw, intends to drill the Gartner SWD No. 1 for the use as a water disposal well. Application will be filed with the New Mexico Oil Conservation Division.

Gartner SWD No. 1 will be located in the NE/4SW/4 of Section 26, Township 30 North, Range 8 West, N.M.P.M. The well will be drilled to a total depth of 8535' and the injection zone will be into the Morrison, Bluff, and Entrada formations. Rate of disposal will be determined by a step-rate injection test.

Any person, firm, association, or corporation, of the State of New Mexico, or the United States of America, deeming that the granting of the above application will impair, or be detrimental to their water rights may protest in writing the proposal set forth in said application. The protest will set forth in writing all protestant's reasons why the application should not be approved and must be filed with the Oil and Gas Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within 15 days of the date of the last publication on this notice.

Legal No. 24217 published in the Farmington Daily Times, Farmington, New Mexico on Wednesday, September 27, 1989.

SALTWATER DISPOSAL WELL
TOWNSHIP 30 NORTH, RANGE 8 WEST, NMPM
SECTION 26: 1330' FSL and 1870' FWL
SAN JUAN COUNTY, NEW MEXICO
(AND INFORMATION ON AREAS WITHIN A 1/2 MILE RADIUS FROM SECTION 26: SW $\frac{1}{4}$)

Section 26: E $\frac{1}{2}$, SW $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$

Section 27: W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$

- 1) Surface ownership- Colorado River Storage Project (USA)
- 2) Grazing lease- (Part of Section 26 and Section 27), Martinez Mesa #5087, Maclovio Archuleta, 608 Venada, Farmington, NM 87401. And (Part of Section 26 and Section 27), Baltzar Peak #5088, Cedelia Ulibarri, 656 Road 4599, Blanco, NM 87412.
- 3) Mineral ownership- USA
- 4) Current leasehold- USA lease #SF-080597; held by production; Lessee: 50%- Tenneco Oil Co., Box 3119, Englewood, CO 80155, 43.50%- Conoco, Inc., Box 2197, Houston, TX 77252, and 6.50%- FMP Operating Co., Box 60004, New Orleans, LA 70160. Operating rights: To the base of the Mesaverde formation - 50% (gas only)- Tenneco Oil Co., 50% (gas only)- Conoco, Inc., and (oil only)- same as lessees. Below the base of the Mesaverde formation- Same as lessees.

Section 26: NW $\frac{1}{4}$ NW $\frac{1}{4}$ and Section 27: NE $\frac{1}{4}$ NE $\frac{1}{4}$

- 1) Surface ownership- (Section 26: NW $\frac{1}{4}$ NW $\frac{1}{4}$ and Section 27: NE $\frac{1}{4}$ NE $\frac{1}{4}$ less 15.33 acres to Jim W. Jones and Melinda Jones) Charles R. Archuleta and Rosemary Archuleta, husband and wife, an undivided one-half interest and Farmington Auto Sales, Inc., an undivided one-half interest, 1710 W. Main, Farmington, NM 87401.

(Section 27: A tract of 15.33 acres, more or less in the NE $\frac{1}{4}$ NE $\frac{1}{4}$, described as follows: Beginning at a point which is 238 feet more or less South 88°58' East from the Southwest corner of said NE $\frac{1}{4}$ NE $\frac{1}{4}$; Thence: North 33°43' East 1126 feet more or less along an existing fence; Thence: South 61°00' East 504.4 feet more or less along an existing fence to East line of NE $\frac{1}{4}$ NE $\frac{1}{4}$; Thence: South 1°17' East 711.76 feet more or less along said East line NE $\frac{1}{4}$ NE $\frac{1}{4}$ to Southeast corner NE $\frac{1}{4}$ NE $\frac{1}{4}$; Thence: North 88°58' West 1082.30 feet along South line of NE $\frac{1}{4}$ NE $\frac{1}{4}$ to the point of beginning) Jim W. Jones and Melinda Jones, joint tenants, P.O. Box 6453, Navajo Dam, NM 87419.
- 2) Mineral ownership- Farmington Auto Sales, Inc.
- 3) Current leasehold- In book 140 at page 10, dated 12-20-49, from Maclovio C. Archuleta, a single man to Stanolind Oil and Gas Company, held by production. There appears to be unrecorded assignments of this lease, the following assignments are of record: 1) In book 698 at page 68, dated 12-31-68, from Pan American Petroleum Corporation to Clinton Oil Company, conveying all rights to the operating agreements for Gartner Gas Unit "A", covering the W $\frac{1}{2}$ of Section 26, and for Gartner Gas Unit "B", covering the E $\frac{1}{2}$ of Section 27, for gas rights from the Mesaverde formation. 2) In book 1098 at page 623, dated effective 11-1-88, from BHP Petroleum (Americas) Inc., BHP Petroleum Company Inc., and Energy Trading, Inc. to Prudential-Bache Income Production Partnership VP-20 (8.58%), Prudential-Bache Energy Income Production Partnership VP-21 (24.92%), Prudential-Bache Energy Income Production Partnership VP-22 (66.50%), covering Section 26: NW $\frac{1}{4}$ NW $\frac{1}{4}$ and Section 27: NE $\frac{1}{4}$ NE $\frac{1}{4}$ of this lease.

SALTWATER DISPOSAL WELL
Township 30 NORTH, RANGE 8 WEST, NMPM
SECTION 26: 1330' FSL and 1870' FWL

SAN JUAN COUNTY, NEW MEXICO

(AND INFORMATION ON AREAS WITHIN A 1/2 MILE RADIUS FROM SECTION 26: SW $\frac{1}{4}$)

Section 34: NE $\frac{1}{4}$

Section 35: NW $\frac{1}{4}$

- 1) Surface ownership- USA
- 2) Grazing lease- Baltzar Peak #5088, Cedelia Ulibarri, 656 Road 4599, Blanco, NM 87412.
- 3) Mineral ownership- USA
- 4) Current leasehold- USA lease #SF-078385-A; held by production; Lessee: 100%- El Paso Production Co., 801 Cherry St., Ft. Worth, TX 76102; Operating Rights: Section 34: NE $\frac{1}{4}$, from the surface to the base of the Mesa Verde formation - Same as lessee, Section 34: NE $\frac{1}{4}$, below the base of the Mesa Verde formation -
X Koch Industries Inc. 7/8, P.O. Box 2256, Wichita, KS 67201, and Texaco Producing
X Inc. 1/8, P.O. Box 3000, Tulsa, OK 74102. Section 35: NW $\frac{1}{4}$, from the base of the Greenhorn Limestone to a point 400' below the base of said formation and consisting of the Graneros formation, Dakota formation and productive upper portion of the Morrison formation -
X Lively Exploration Co., 1010 First City National Bank Bldg., Houston, TX 77002, Section 35: NW $\frac{1}{4}$, from 3650' to 3750' -
Lively Exploration Co. 2/3, and El Paso Production Co. 1/3, Section 35: NW $\frac{1}{4}$, for all other depths - El Paso Production Co.

Section 35: NE $\frac{1}{4}$

- 1) Surface ownership- USA
 - 2) Grazing leases- 1) Baltzar Peak #5088, Cedelia Ulibarri, 656 Road 4599, Blanco, NM 87412. 2) Navajo Dam #5089, Daniel Munoz, P.O. Box 891, Farmington, NM 87401.
 - 3) Mineral ownership- USA
 - 4) Current leasehold- USA lease #SF-078385; held by production; Lessee and Operating rights: Tenneco Oil Co. 50%, Box 3119, Englewood, CO 80155, Conoco Inc. 43.50%, Box 2197, Houston, TX 77252, FMP Operating Co. 6.50%, Box 60004, New Orleans, LA 70160
-

FEDERAL ABSTRACT COMPANY

P. O. BOX 2266

SANTA FE, NEW MEXICO 87501

RED - STATE LAND

BLUE - FEE LAND

TWP., 30 N. RGE 8 W. N.M.P.M.

San Juan

COUNTY

DATE 8/3/89

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Handwritten annotations on the grid:

- Section 27: 3, 3, 3, 3, 3 (vertical column)
- Section 28: 3, 3, 3 (vertical column)
- Section 29: 2, 2, 1 (vertical column)
- Section 30: 3, 3, 3 (vertical column)
- Section 31: 2, 2, 1 (vertical column)
- Section 32: 3, 3, 3 (vertical column)
- Section 33: 2, 2, 1 (vertical column)
- Section 34: 3, 3, 3 (vertical column)
- Section 35: 3, 3, 3 (vertical column)
- Section 36: 3, 3, 3 (vertical column)

- SF 078385 Lease issued 6/1/49, held by production
 Lessee: Tenneco Oil Co. 50%, Box 3119, Englewood, CO 80155
 Conoco Inc. 43.5%, Box 2197, Houston, TX 77252
 FMP Operating Co. 6.5%, Box 60004, New Orleans, LA 70160
 Operating Rights: lessees all
- SF 078385-A Lease issued 6/1/49, held by production
 Lessee: El paso Production Co., 801 Cherry St., Ft. Worth, TX 76102
 Operating Rights: sec. 34-NE $\frac{1}{4}$ from surface to base of Mesa Verde:
 lessee all
 below base of Mesaverde:
 Koch Industries Inc. 7/8, P.O. Box 2256, Wichita, KS 67201
 Texaco Producing Inc. 1/8, P.O. Box 3000, Tulsa, OK 74102
sec. 35-NW $\frac{1}{4}$ from base of Greengorn Limestone to a point 400' below the base of said formation and consisting of the Graneros formation, Dakota formation & productive upper portion of the Morrison formation:
 Lively Exploration Co., 1010 1st City Nat. Bank Bldg., Houston, TX 77002
 from 3650' to 3750':
 Lively Exploration Co. 2/3
 lessee 1/3
 all other depths:
 lessee all

X - Fee Minerals

3. SF 080597 Lease issued 12/1/50, held by production
Lessee: Tenneco Oil Co. 50%
Conoco Inc. 43.5%
FMP Operating Co. 6.5%
Operating Rights: to the base of the Mesaverde formation:
Tenneco Oil Co. 50% gas
Conoco inc. 50% gas
Lessees- all oil
below the base of the Mesaverde formation:
lessees- all oil & gas



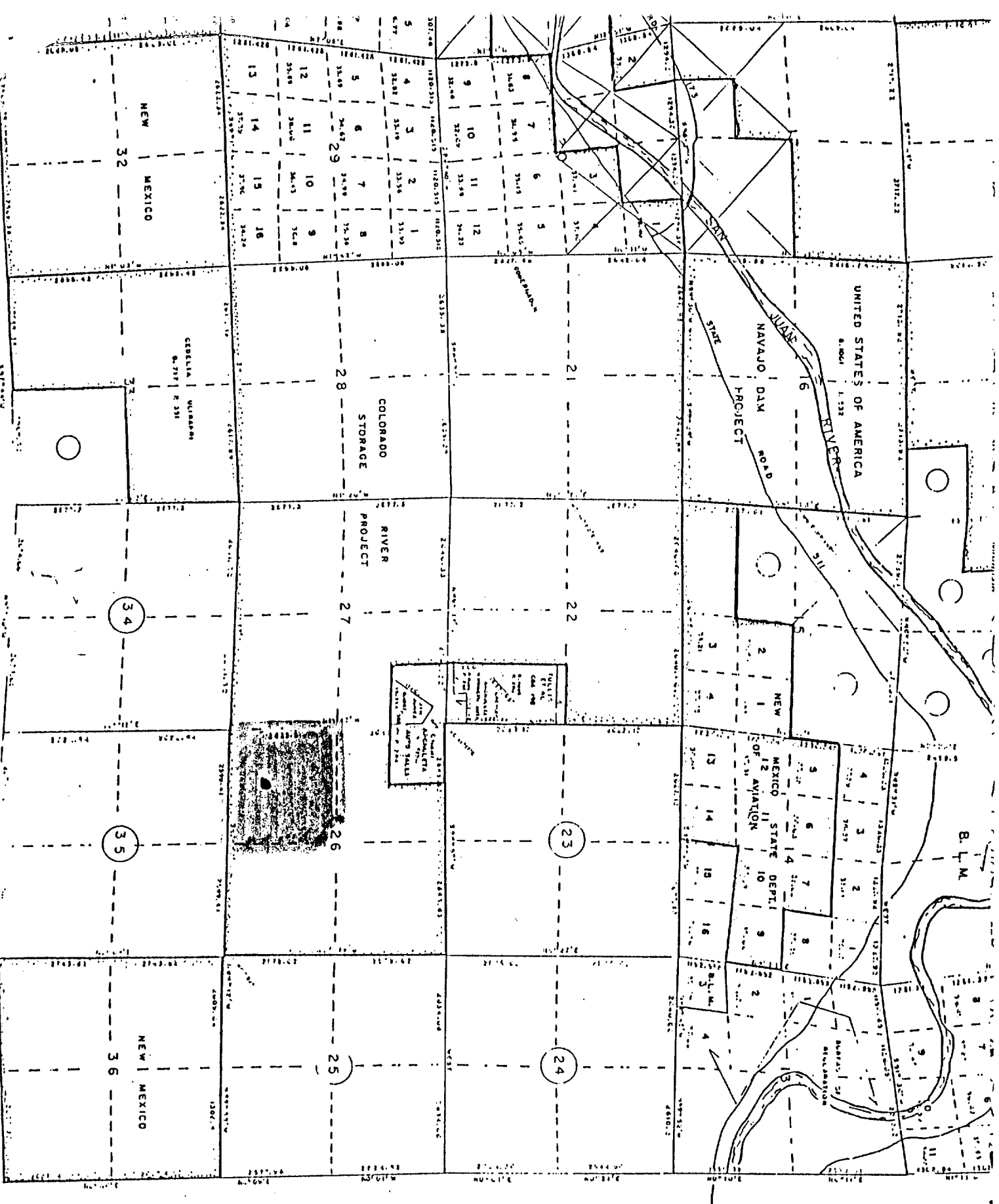
SAN JUAN COUNTY
NEW MEXICO

NOTE
INFORMATION CONTAINED ON THIS
MAP IS BASED SOLELY ON RECORDED
DATA. (NO LIABILITY ASSUMED)

T30N R8W

○ - FEDERAL

County Assessor's Plat



November 6, 1989

(See Attached Addressee List)

File: KSD-167-400.1

Proposed Water Disposal Well
Gartner SWD #1

Dear Sir:

This is to advise you that Amoco Production Company is requesting approval from the Division Director of the New Mexico Oil Conservation Division to drill a water disposal well:

Gartner SWD No. 1
1330' FSL x 1870' FWL
Section 26, T30N, R8W
San Juan County, New Mexico

Find attached a copy of the application that is being submitted. Please note that you have 15 days from the date this application is received to file any objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, NM 87501.

Very truly yours,

T. D. Autry KSD

89002.VAR.jmr

Attachment

Leasehold Operators

Amoco Production Company
(making application)

Conoco Inc.
P. O. Box 2197
Houston, TX 77252

Koch Industries, Inc.
P.O. Box 2256
Wichita, KS 67201

Texaco Producing Inc.
P.O. Box 3000
Tulsa, OK 74102

Lively Exploration Company
1010 First City National Bank Building
Houston, TX 77002

Surface Owners

Bureau of Land Management
Federal Building
701 Camino del Rio
Durango, CO 81301

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. ☐ Restricted Delivery
↑(Extra charge)↑

3. Article Addressed to: Texaco Producing Inc. pP. O. Box 3000 Tulsa, OK 74102	4. Article Number P084906756 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid) 03
6. Signature — Agent X <i>James L. Du'8H</i>	
7. Date of Delivery NOV 20 1989	

PS Form 3811, Mar. 1987

* U.S.G.P.O. 1987-178-268

DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. ☐ Restricted Delivery
↑(Extra charge)↑

3. Article Addressed to: Bureau of Land Management Federal Building 701 Camino del Rio Durango, CO 81301	4. Article Number P084906755 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid) 03
6. Signature — Agent X <i>R. Penzoneau</i>	
7. Date of Delivery 11-17-89	

PS Form 3811, Mar. 1987

* U.S.G.P.O. 1987-178-268

DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
↑(Extra charge)↑

3. Article Addressed to: <i>Lively Exploration Co. 1300 Post Oak Blvd. Houston, TX 77056</i>	4. Article Number <i>P087906824</i>
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Addressee <i>X</i>	8. Addressee's Address (ONLY if requested and fee paid) -
6. Signature — Agent <i>X Natalie Reed</i>	
7. Date of Delivery <i>11/30</i>	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN REC

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
↑(Extra charge)↑

3. Article Addressed to: Conoco Inc. P. O. Box 2197 Houston, TX 77252	4. Article Number <i>P084906758</i>
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Addressee <i><</i>	8. Addressee's Address (ONLY if requested and fee paid)
Signature — Agent <i>M.B. McDonald</i>	
Date of Delivery NOV 17 1989	

rm 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT



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

GARREY CARRUTHERS
GOVERNOR

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

Date: 12-15-89

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 12-15-89
for the Ameco PROD CO. GARTNER SWD #1
Operator Lease & Well No.

K-26-300-SW and my recommendations are as follows:
Unit, S-T-R

Approve

Yours truly,

Ernie Busch