

CASE 3598: Appli. of DUGAN PROD.
for creation of new gas pool,
rules and three unorthodox locs.

CASE No.
3598

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

**BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:**

CASE No. 3598
Order No. R-3274

NOMENCLATURE

**APPLICATION OF DUGAN PRODUCTION CORPORATION
FOR THE CREATION OF A NEW GAS POOL, SPECIAL
POOL RULES AND THREE UNORTHODOX GAS WELL
LOCATIONS, SAN JUAN COUNTY, NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 28, 1967, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 18th day of July, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Dugan Production Corporation, is the owner and operator of the Thomas A. Dugan Shiprock Lease comprising all of Section 14, Township 30 North, Range 18 West, NMPM, San Juan County, New Mexico.

(3) That the applicant seeks the creation of a new gas pool for Gallup production and the promulgation of special rules and regulations governing said pool, including a provision to authorize exception to the pump-plug method of cementing required by Rule 107 (a) of the Commission Rules and Regulations.

(4) That the Thomas A. Dugan Shiprock Well No. 3, located in Unit B of Section 14, Township 30 North, Range 18 West, NMPM, San Juan County, New Mexico, has discovered a separate common source

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CASE No. 3598
Order No. R-3274

of supply which should be designated the North Shiprock-Gallup Gas Pool; that the vertical limits of said pool should be the Gallup formation; and that the horizontal limits of said pool should be the N/2 and SE/4 of Section 14, Township 30 North, Range 18 West, NMPM, San Juan County, New Mexico.

(5) That the applicant has not established the necessity for special rules and regulations governing the proposed pool, and therefore the proposed pool should be governed by the state-wide rules relative to the drilling, spacing, and production of gas wells.

(6) That the applicant cemented the production casing in the following three wells by pouring a cement and sand slurry down the annulus behind the 2 7/8-inch production casing:

TOWNSHIP 30 NORTH, RANGE 18 WEST, NMPM
SAN JUAN COUNTY, NEW MEXICO

| LEASE | WELL NO. | LOCATION |
|--------------------------|----------|-------------------------------------|
| Thomas A. Dugan Shiprock | 5 | 1650 FWL and 1870 FWL of Section 14 |
| Thomas A. Dugan Shiprock | 7 | 990 FWL and 2310 FWL of Section 14 |
| Thomas A. Dugan Shiprock | 8 | 2310 FWL and 660 FWL of Section 14 |

(7) That the method of cementing employed by the applicant will adequately protect all oil- and/or gas-bearing strata encountered in the aforesaid wells provided the applicant performs additional cementing of the aforesaid casing in said Wells 5 and 7 sufficient to bring the cement to the surface.

(8) That the applicant also seeks approval of unorthodox gas well locations for the above-described three wells.

(9) That the subject wells were originally projected as oil wells for the production of oil from the Gallup formation and were drilled at standard oil well locations but were completed as gas wells for the production of gas from the Gallup formation.

(10) That approval of the requested unorthodox gas well locations will prevent waste and will not violate correlative rights.

(11) That the applicant further seeks authority, as an exception to Rule 403 of the Commission Rules and Regulations, to meter production from all wells on the aforementioned lease in the

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CASE No. 3598

Order No. R-3274

proposed Gallup gas pool through one meter and to allocate production to the individual wells on the basis of well tests.

(12) That there is common ownership of the working interest and common ownership of the royalty interest.

(13) That approval of the requested exception to said Rule 403 will allow the applicant to operate its Thomas A. Dugan Shiprock Lease in the most economic manner and will be in the interest of conservation, the prevention of waste and the protection of correlative rights provided the producing capability of each well is tested prior to commingling of production and yearly thereafter.

IT IS THEREFORE ORDERED:

(1) That a new pool in San Juan County, New Mexico, classified as a gas pool for Gallup production, is hereby created and designated the North Shiprock-Gallup Gas Pool, with vertical limits comprising the Gallup formation, and horizontal limits comprising the E/2 and SE/4 of Section 14, Township 30 North, Range 18 West, NMPM, San Juan County, New Mexico.

(2) That the applicant's request for the promulgation of special rules and regulations governing the aforesaid pool is hereby denied.

(3) That the applicant is hereby granted an exception to the pump and plug method of cementing required by Rule 107 (a) of the Commission Rules and Regulations to permit the cementing of the production casing in the following three wells by pouring a cement and sand slurry down the annulus behind the 2 7/8-inch casing:

TOWNSHIP 30 NORTH, RANGE 18 WEST, NMPM
SAN JUAN COUNTY, NEW MEXICO

| LEASE | WELL NO. | LOCATION |
|--------------------------|----------|-------------------------------------|
| Thomas A. Dugan Shiprock | 5 | 1650 FNL and 1870 FEL of Section 14 |
| Thomas A. Dugan Shiprock | 7 | 990 FNL and 2310 FWL of Section 14 |
| Thomas A. Dugan Shiprock | 8 | 2310 FSL and 560 FEL of Section 14 |

PROVIDED HOWEVER, that the applicant shall perform additional cementing of the aforesaid casing in said Wells 5 and 7 sufficient to bring the cement to the surface;

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CASE No. 3598
Order No. R-3274

PROVIDED FURTHER, that the aforesaid additional cementing shall be completed on or before August 10, 1967, and the applicant, Dugan Production Corporation, shall notify the Aztec District Office of the Commission of the date and hour said recementing is to be commenced.

(4) That the applicant is hereby authorized unorthodox gas well locations in the North Shiprock-Gallup Gas Pool for the above-described three wells.

(5) That the applicant is hereby granted an exception to Rule 403 of the Commission Rules and Regulations to permit the metering of production from all gas wells on the aforementioned Thomas A. Dugan Shiprock Lease, North Shiprock-Gallup Gas Pool, through one meter and to allocate production to the individual wells on the basis of well tests;

PROVIDED HOWEVER, that the operator shall conduct a 24-hour test of each well prior to commingling of production, by flowing the well through the common meter, and yearly thereafter. Tests shall be reported to the Aztec District Office of the Commission within 30 days following completion of said tests;

PROVIDED FURTHER, that the aforementioned authority to meter gas production through one meter shall remain in effect only so long as the North Shiprock-Gallup Gas Pool remains an unprorated gas pool.

(6) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

David F. Cargo
DAVID F. CARGO, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

State of New Mexico
Oil Conservation Commission



STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

July 18, 1967

Re: Case No. 3598
Order No. R-3274
Applicant:

DUGAN PRODUCTION CORP.

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

Hobbs OCC x
 Artesia OCC
 Aztec OCC x
 Other _____

Post Office Box 234
Zip Code 87401

DUGAN PRODUCTION CORP.

THOMAS A. DUGAN, President
709 BLOOMFIELD Rd.
FARMINGTON, NEW MEXICO

June 2, 1967

TELEPHONE 325-9184 Office
325-5694 Home

Area Code 505

JUN 5 1967

Case 3598

*operating as in kind in
the area*

Mr. A. L. Porter
Oil Conservation Commission
Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

We would like to request an examiner hearing to establish special pool rules for a proposed pool, the North Shiprock-Callup Gas Pool, and to obtain the Commissions approval for unorthodox gas well locations and the Commissions approval for deviating from Rule 107, Paragraph A, cementing by the pump-plug method. We are also requesting approval from the Commission to meter all production from the wells on the Shiprock Lease through one meter and allocate individual well production by special well tests.

The unorthodox gas well locations are:

| Well | Location | Section | Township | Range |
|-------------|-----------------------|---------|----------|----------------------|
| Shiprock #5 | 1650' FNL & 1870' FEL | 14 | 30N | 18W <i>Amey/22m.</i> |
| Shiprock #7 | 990' FNL & 2310' FWL | 14 | 30N | 18W <i>-</i> |
| Shiprock #8 | 2310' FSL & 660' FEL | 14 | 30N | 18W <i>07</i> |

Sincerely,

Thomas A. Dugan
Thomas A. Dugan
jl

cc: Emery Arnold

DOCKET M-1002

Date 6-15-67

li

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

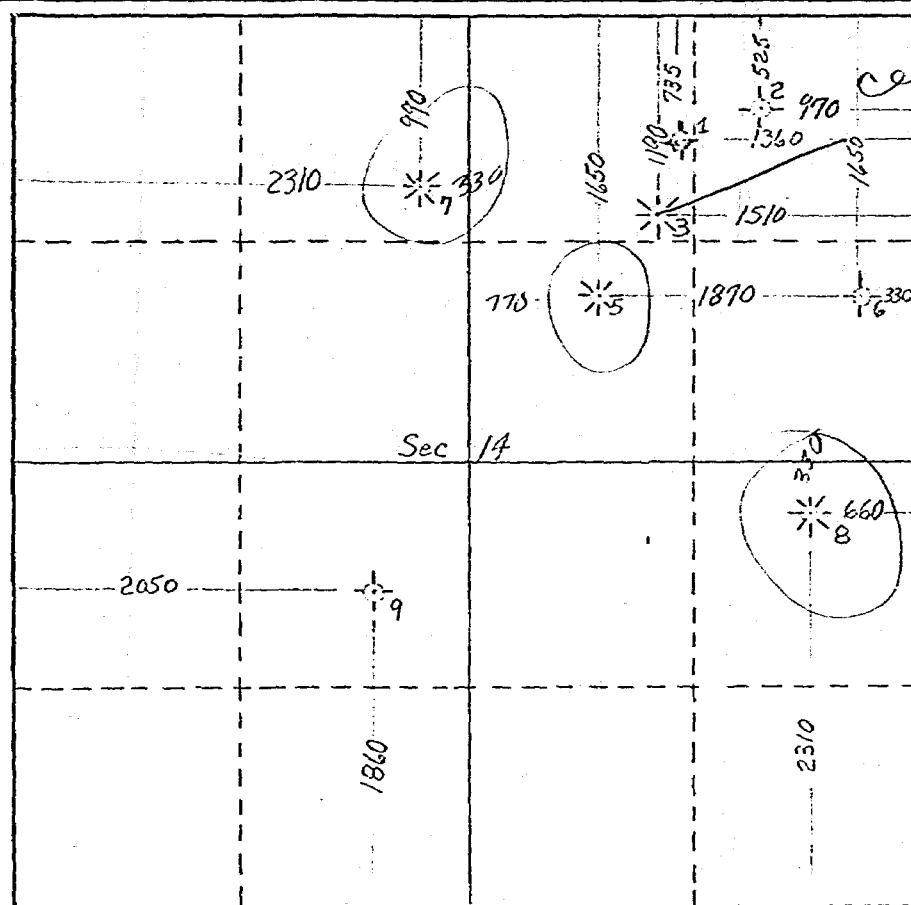
| | | | | |
|------------------------------------|--------------------------------------|--------------------------|-----------------------------|---------------------------|
| Operator Thomas A. Dugan | | Lease Shiprock | | Well No. |
| Unit Letter | Section 14 | Township 30 N | Range 18 W | County San Juan |
| Actual Footage Location of Well: | | | | |
| feet from the | | line and | feet from the line | |
| Ground Level Elev: | Producing Formation Gallup | Pool | Dedicated Acreage: Acres | |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name _____
Position _____
Company _____
Date _____

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed _____
Registered Professional Engineer and/or Land Surveyor

Certificate No. _____

Case. 3588

Heard. 6-28-67

Rec. 6-28-67

1. Grant. Bryan in exception to:

(a) Rule 107(a), allow him to cement by pouring cement & sand slurry down the hole casing annulus on the 3 wells in question.

(b) Grant now its location for the 3 wells: as listed on attached application.

(c) allow exception to R-1670 rule 21(A). allowing him to meter all Gallup Gas wells on the lease consisting of sec. 14 - 30 N-18W.

Production shall be allocated to individual wells after testing each well by flowing it into the pipeline.

Create The H. Shiprock Gallup Gas Pool consisting of the following 30 N-18W.

Sec. 14. N/2. & SE/4

1. Do not need pool Rules.

2. Operate as individual.

3. Give pool name.

4. Pro-portionality & P+P - include

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-4491 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
EXAMINER HEARING

June 28, 1967

IN THE MATTER OF:

Application of Dugan Production
Corporation for the creation of
a new gas pool, special pool rules
and three unorthodox gas well
locations, San Juan County,
New Mexico.

Case No. 3598

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

REGISTER

HEARING DATE JUNE 28, 1967

TIME: 9 A.M.

| NAME: | REPRESENTING: | LOCATION: |
|--|---|---------------------------------------|
| Thomas A. Huggan Harold Vaythburg Jr. | Tesoro Petroleum Corporation & Walker Bros. Oil Company | Farmington, N.M. San Antonio Texas |
| A. R. Kendrick | o c c | artec |
| Boris Kell | white bell kelly | S.F. |
| Richard L. Ray | Franklin & Fair Oil Co. Fair Oil Company | Tyler, Tex. Nowell |
| Ernest M. Smith | Franklin & Fair Oil Co. | " |
| Paul W. Lator, Jr. | " | " |
| Rogers C. Lator | " | " |
| Don Stevens | Lo May & Stevens | South Fe |
| O. M. Salaman | Bell Petroleum Company | Los Angeles, Calif. |
| C. L. WHIGHAM | TEXACO | MIDLAND TEX. |
| Richard J. Dennis | Montgomery, Fickler & Anderson | Santa Fe |
| Emory Arnold | W A C C | artec |
| N. D. Wame | RW Byram | Santa Fe - Austin |
| V. T. Lyon | Continental Oil Co. | Hobbs, N.M. |
| C. C. Woodward Jr. | Continental Oil Co. | Hobbs, N.M. |

NEW MEXICO OIL CONSERVATION COMMISSION
EXAMINER HEARING
SANTA FE, NEW MEXICO

REGISTER

HEARING DATE JUNE 28, 1967 TIME: 9 A.M.

| NAME: | REPRESENTING: | LOCATION: |
|-------------------|----------------|---------------|
| Jason Kellahin | Kellahin & Fox | Santa Fe |
| John Ward | U. S. b. S. | Farmington |
| John Swendig | Amerada | Hubbs |
| A. L. Vetter, Jr. | OCC | South of |
| Ed Reed | Stultz & Co. | Midland |
| P. J. Duncan | Walter Duncan | Denver, Colo. |

MR. UTZ: The Hearing will come to order, please.

The first case on the docket will be Case 3598.

MR. HATCH: Application of Dugan Production Corporation for the creation of a new gas pool, special pool rules and three unorthodox gas well locations, San Juan County, New Mexico.

MR. UTZ: Before we continue, does anyone have any cases they would like to dismiss at this time, or continue? If not, everything that's advertised will be heard in the order it appears on the docket. Mr. Dugan, you may proceed.

(Witness sworn.)

THOMAS A. DUGAN

called as a witness, having been first duly sworn, testified as follows:

MR. UTZ: You are representing yourself, are you not, Mr. Dugan?

MR. DUGAN: Yes. Thomas A. Dugan, 907 Hallett Circle, Farmington, New Mexico.

MR. UTZ: You may proceed with your case.

MR. DUGAN: Okay. I have six exhibits.

MR. UTZ: All right. Will you have the reporter mark them there, please?

(Whereupon, Applicant's Exhibits 1 through 6 were marked for identification.)

MR. DUGAN: Exhibit 1 is a plat showing the location of the wells in Section 14, Township 30 North, Range 18 West and we have requested approval for an unorthodox spacing on wells No. 5, 7 and 8. These wells were originally drilled as prospective oil wells on oil well locations and spacing and turned out to be gas wells producing from the Gallup formation.

Exhibit 2 shows the leaseholders in the general area of the Shiprock lease and we have also asked for the permission to deviate from the pump plug method of cementing, and this is illustrated by Exhibit 3, which is a sketch of the method that the wells were completed; 5-1/2 casing was set through surface boulders at approximately 50 feet and then 4-3/4 hole was air drilled through the Gallup formation and 2-7/8ths line pipe was run with a lock and packer. Perforated tubing was below the packer set on bottom, the packer set and the annulus filled with ready-mixed cement dumped from the surface.

Do you have any questions on that?

MR. UTZ: How do you know that you are going to get that cement on the top of the packer?

MR. DUGAN: It's a dry hole, it ought to go.

MR. UTZ: No boulders?

MR. DUGAN: Well, you have the boulders cased off at the surface.

MR. UTZ: Then you only have boulders as deep as your surface casing is set?

MR. DUGAN: Yes, sir.

MR. UTZ: The rest of it is what type of formation, shale?

MR. DUGAN: Shale, mancoous shale.

MR. UTZ: The depth of your packer in most cases will be how deep?

MR. DUGAN: Oh, the average depth is about 375.

MR. ARNOLD: How much calculated void did you have there for fillup?

MR. DUGAN: Well, it varies on different wells, one of them I think we filled to the surface and the other we've used --

MR. ARNOLD: Did the amount of cement used check out all right against the annulus we had?

MR. DUGAN: Fairly close. We are dealing the ready-mix in yards and the volume isn't very accurate.

MR. UTZ: And you don't know whether you are getting your money's worth in cement or not?

MR. DUGAN: I have no doubt we weren't getting our money's worth. I have never questioned that. It's kind of a poor boy approach but it works all right.

MR. UTZ: What type of cement will this be, 2,000

pounds or --

MR. DUGAN: Well --

MR. UTZ: Portland or what?

MR. DUGAN: Yes, it's just Portland Neat Cement with sand. That's the method that we use on most of them. The two of them that we have just dumped cement alone down the annulus without a sand mixture. So the compressive strength with the sand will be considerably higher than with Neat Cement.

MR. UTZ: There will be no gravel in the mix?

MR. DUGAN: No. I don't have the annulus, enough annulus to get gravel down.

MR. UTZ: Will you have a pretty slurry mixture so it will run down all right?

MR. DUGAN: Yes. We have mixed it real wet.

MR. UTZ: How much do you intend to put in the hole?

MR. DUGAN: Well, we varied from a yard to two yards of cement.

MR. UTZ: Approximately what depths will that bring the cement to?

MR. DUGAN: Two yards brought it to the surface.

MR. UTZ: And a yard brought it half-way to the surface?

MR. DUGAN: Well, approximately.

MR. UTZ: These wells are already completed?

MR. DUGAN: Yes, four completed.

MR. UTZ: How much did you put in each one?

MR. DUGAN: I didn't tabulate that, but there's --

We might go to Exhibit 5, Well No. 3 was cemented, has 2-7/8ths-inch tubing cemented to 995 feet, which is through the producing interval, and it was perforated through the 2-7/8ths tubing. This well was cemented to the surface with normal pump plug method.

Well No. 5 was completed as shown in this Exhibit 3 and a yard of cement was used on it. Well No. 7 was completed in the same manner and we used 25 sacks of Neat Cement dumped down the annulus there.

Well No. 8 was cemented with two yards of cement.

MR. UTZ: 25 sacks would be two sacks less than a yard?

MR. DUGAN: Right.

MR. UTZ: So the top of your cement there would probably be around 175 or 80 feet?

MR. DUGAN: I didn't calculate it.

MR. UTZ: I was just kind of making a round house guess. You said two yards would come to the surface?

MR. DUGAN: Yes. That is approximately right, I'm sure.

MR. UTZ: I think that's close enough, Tom. How did you complete your No. 8?

MR. DUGAN: It was completed in the same manner as shown in the Exhibit 3 with two yards of cement.

MR. UTZ: So it's cemented to the surface?

MR. DUGAN: Yes, sir.

MR. UTZ: I guess that's all the questions we have about the cement at this point.

MR. DUGAN: Well, Exhibit 4 is an estimation of the reserves which indicate there's approximately 200,000 MCF of gas to be recovered, which is about, after royalty and taxes, about \$18,000.

MR. UTZ: Just a minute. I seem to be mixed up on exhibit numbers here. Your Exhibit No. 4 is a list of the wells.

MR. DUGAN: I might be mixed up, too. Yes. Which is Exhibit 4?

MR. UTZ: It's a list of the wells, discovery wells, development wells.

MR. DUGAN: Yes, that's just the application for a new pool and I am asking for 160-acre proration units. I guess the reserves is Exhibit 6.

MR. UTZ: Yes, sir, it is.

MR. DUGAN: Like I said, there's approximately

200,000 MCF, which is \$18,000 after taxes and royalty, which accounts for the cementing approaches, and the request that we meter gas production from the lease through one meter.

MR. UTZ: What was your abandonment pressure?

MR. DUGAN: Fifty.

MR. UTZ: Fifty pounds.

MR. DUGAN: We have a contract to sell to Navajo Tribal Utility, which supplies the City of Shiprock. This lease is located about three-quarters of a mile from their existing facilities.

MR. UTZ: Mr. Dugan, these locations are necessary because you drilled them on the oil well locations and they turned out to be gas wells, is that the answer to that?

MR. DUGAN: Yes, sir.

MR. UTZ: At the present time you have four wells drilled on your lease?

MR. DUGAN: Yes, sir.

MR. UTZ: Are they all producing wells?

MR. DUGAN: There are four wells capable of producing. There have been nine wells drilled altogether.

MR. UTZ: To summarize the thing, you are asking for an exception to the 107 (a)?

MR. DUGAN: Yes.

MR. UTZ: In regard to your cementing, you are

asking for non-standard locations and those locations are listed on one of your exhibits, are they?

MR. DUGAN: No, sir.

MR. UTZ: They're listed somewhere?

MR. DUGAN: They are on Exhibit 1 but Well No. 3 is not unorthodox.

MR. UTZ: They're listed on the front page of your application now, the foot locations there are correct, are they?

MR. DUGAN: Yes, sir, they are correct.

MR. UTZ: The first thing you are asking for is permission to meter all the wells on the 640-acre lease?

MR. DUGAN: All wells in the section through one meter.

MR. UTZ: Well, your lease is 640 acres, isn't it?

MR. DUGAN: Yes, sir.

MR. UTZ: How about other wells, future wells on this, do you intend to drill them on standard locations or do you intend to drill any more?

MR. DUGAN: I don't intend to drill any more to the Gallup formation. Now we might drill some more to the Dakota which, of course, will penetrate the Gallup. If we failed in the Dakota we might complete it at the Gallup well.

MR. UTZ: That wouldn't be covered in this

application?

MR. DUGAN: No, sir.

MR. UTZ: Are you going to compress this gas on the lease or are you going to go to the City of Shiprock under the 50 pounds of pressure?

MR. DUGAN: We will deliver at 50 pounds of pressure.

MR. UTZ: Are all the wells that you have drilled in one quarter section?

MR. DUGAN: No, they're in two quarter sections, aren't they? There's three actually, Northeast, Northwest and Southeast.

MR. UTZ: The meter exception will be exception to R-1670, Rule 21 (a). This will be a non-prorated pool, is that correct, and is at the present time?

MR. DUGAN: It is at the present time. I'm sure it will probably stay that way.

MR. UTZ: What type test do you intend to take to charge the production back to the individual wells?

MR. DUGAN: By shutting all the wells in and producing one at a time on a semi-annual basis.

MR. UTZ: Constant back pressure?

MR. DUGAN: Yes.

MR. UTZ: That is the same back pressure for all wells?

MR. DUGAN: It will be the pressure that we're delivering at, yes.

MR. UTZ: Are there any other questions of the witness?

MR. ARNOLD: Is the ownership under Section 14 exactly common under all the sections?

MR. DUGAN: Yes, sir.

MR. UTZ: It's all Navajo and Dugan?

MR. DUGAN: I have some partners.

MR. UTZ: Any other questions? The witness may be excused.

(Witness excused.)

MR. UTZ: Are there statements in this case? The case will be taken under advisement.

MR. HATCH: Letter from Navajo Tribal Utility authority in support of Mr. Dugan's application for the metering exception.

MR. UTZ: The case will be taken under advisement.

dearnley-meier reporting

I N D E X

WITNESS

THOMAS A. DUGAN

Testimony

PAGE

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EXHIBITS

Applicant's 1 through 6

MARKED

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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 29th day of June, 1967.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:
June 19, 1971.

I do hereby certify that the foregoing is a correct copy of the proceedings in the hearing of Case No. 3598, heard by me on June 28, 1967.

Thos. O. McKee, Examiner
New Mexico Oil Conservation Commission

Docket No. 19-67

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 28, 1967

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

- CASE 3598: Application of Dugan Production Corporation for the creation of a new gas pool, special pool rules and three unorthodox gas well locations, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the North Shiprock-Gallup Gas Pool in Section 14, Township 30 North, Range 18 West, San Juan County, New Mexico and the promulgation of special rules therefor including a provision to authorize exception to the pump-plug method of cementing prescribed by Rule 107 (a). Applicant also seeks authority to meter production from all wells on its Shiprock lease in said pool through one meter and to allocate production from the individual wells on the basis of well tests. Applicant further seeks approval of the unorthodox gas well locations for its Shiprock Well No. 5 located 1650 feet from the North line and 1870 feet from the East line, its Shiprock Well No. 7 located 990 feet from the North line and 2310 feet from the West line, and its Shiprock Well No. 8 located 2310 feet from the South line and 660 feet from the East line, all in Section 14, Township 30 North, Range 18 West.
- CASE 3599: Application of Franklin, Aston and Fair, Inc. for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formations through two wells located in Unit E of Section 17 and Unit A of Section 18, Township 17 South, Range 31 East, Grayburg-Jackson Pool, Eddy County, New Mexico.
- CASE 3600: Application of Texaco Inc., for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Cotton Draw Unit Well No. 65, located in Unit G of Section 2, Township 25 South, Range 31 East, Eddy County, New Mexico, to produce gas from an undesignated Wolfcamp gas pool and gas from an undesignated Morrow gas pool through parallel strings of tubing.
- CASE 3601: Application of Walker Brothers Oil Company and Tesoro Petroleum Corporation for an exception to Rule 104 C I, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the well location requirements of Rule 104 C I to permit the drilling of more than one well on a 40-acre tract, said wells being located closer than 660 feet to each other and with each 40-acre tract being subject to a single 40-acre allowable. The above exceptions for the South Hospah Upper Sand Oil Pool and the South Hospah Lower Sand Oil Pool, McKinley County, New Mexico, would be applicable to Walker's Hansen Lease comprising the S/2 of Section 6, and Walker's Santa Fe Lease comprising the N/2 and

June 28, 1967 Examiner Hearing

Docket No. 19-67

and SW/4 of Section 7, both in Township 17 North, Range 8 West and to Tesoro's Santa Fe Lease comprising the SE/4 of Section 1, Township 17 North, Range 9 West.

- CASE 3602: Application of Amerada Petroleum Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its State WE "K" Well No. 1 located in Unit F of Section 15, Township 21 South, Range 35 East, Lea County, New Mexico, in such a manner as to permit the production of gas from an undesignated Wolfcamp gas pool and gas from an undesignated Morrow gas pool through parallel strings of tubing.
- CASE 3603: Application of Continental Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Langlie Jack Unit Area comprising 680 acres, more or less, of Federal and Fee lands in Township 24 South, Range 37 East, Lea County, New Mexico.
- CASE 3604: Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Langlie Jack Unit Area by the injection of water into the Seven Rivers-Queen formations through 8 injection wells in Sections 17, 20, 21, and 29, Township 24 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 3605: Application of Walter Duncan for a casing-cementing exception, and for an unorthodox location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete his North Hogback 1 Well No. 5 at an unorthodox Dakota oil well location 2466 feet from the North line and 2310 feet from the East line of Section 1, Township 29 North, Range 17 West, San Juan County, New Mexico. Applicant further seeks an exception to the provisions of Rule 107(a) concerning cementing of casing.
- CASE 3606: Application of Bell Petroleum Company for salt water disposal and a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its State "K" Well No. 1 located in Unit K of Section 21, Township 11 South, Range 33 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the North Bagley-Lower Pennsylvanian formation and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres and other formations included in the open-hole interval from 3845 feet to 7800 feet.

June 28, 1967 Examiner Hearing

Docket No. 19-67

CASE 3607:

Application of Stoltz & Company for an amendment to Order No. R-3238, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment to Order No. R-3238, which order authorized the disposal of produced salt water into a playa lake in Sections 12 and 13, Township 10 South, Range 32 East, and Sections 6 and 7, Township 10 South, Range 33 East, Lea County, New Mexico. Applicant seeks to alter the location of the three observation wells required by said order. Alternate locations proposed by applicant are as follows: one well 300 feet from the South line and 1100 feet from the West line; one well 600 feet from the South line and 1400 feet from the East line; one well 2400 feet from the South line and 1100 feet from the East line, all in Section 7, Township 10 South, Range 33 East. Applicant further seeks the amendment to Order No. R-3238 to alter the location of two of the three permanent water level markers required by said order. Applicant proposes one marker on the North shore of the lake in lieu of the marker required in the SW/4 SE/4 of Section 6 and one marker on the East shore of the lake in lieu of the marker required in the SE/4 NW/4 of Section 7.



"AN ENTERPRISE OF
THE NAVAJO TRIBE"

sent

file

NAVAJO TRIBAL UTILITY AUTHORITY

9 June 1967

MAILED
JUN 11 1967

PHONE: 871-4166

P. O. BOX 68

WINDOW ROCK, ARIZONA

BRANCH OFFICES

SHIPROCK

KAYENTA

CHINLE

TUBA CITY

Mr. A. L. Porter
Secretary Director
Oil and Gas Conservation Commission
State of New Mexico
State Land Office Building
Santa Fe, New Mexico

Case 3598

Re: Application of Thomas A. Dugan

Dear Mr. Porter:

In connection with the hearing set for June 28, 1967, on an application by Mr. Thomas A. Dugan, to meter production through one meter, among other things, this is to express the approval and desire of the Navajo Tribal Utility Authority that such permission as to the metering be granted.

The Navajo Tribal Utility Authority is interested in purchasing gas for use in the community of Shiprock, New Mexico from Dugan and such permission is vital to our concluding arrangements with Dugan due to the uncertainty of low reserves thus far confirmed.

Very truly yours,

C. Mac Eddy

C. Mac Eddy
General Manager

CME/vrm

DOCKET M-15-67

6-15-67

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

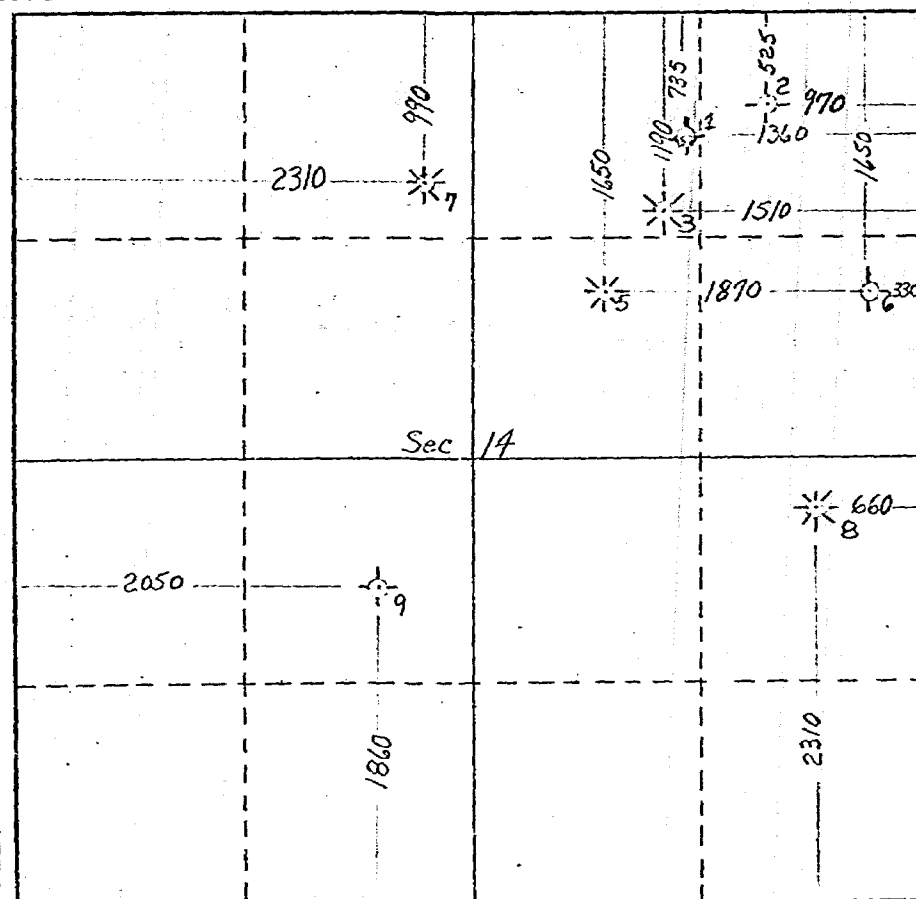
| | | | | |
|------------------------------------|--------------------------------------|--------------------------|-----------------------------|---------------------------|
| Operator Thomas A. Dugan | | Lease Shiprock | | Well No. |
| Unit Letter | Section 14 | Township 30 N | Range 18 W | County San Juan |
| Actual Footage Location of Well: | | | | |
| feet from the | | line and | feet from the line | |
| Ground Level Elev: | Producing Formation Gallup | Pool | Dedicated Acreage: Acres | |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

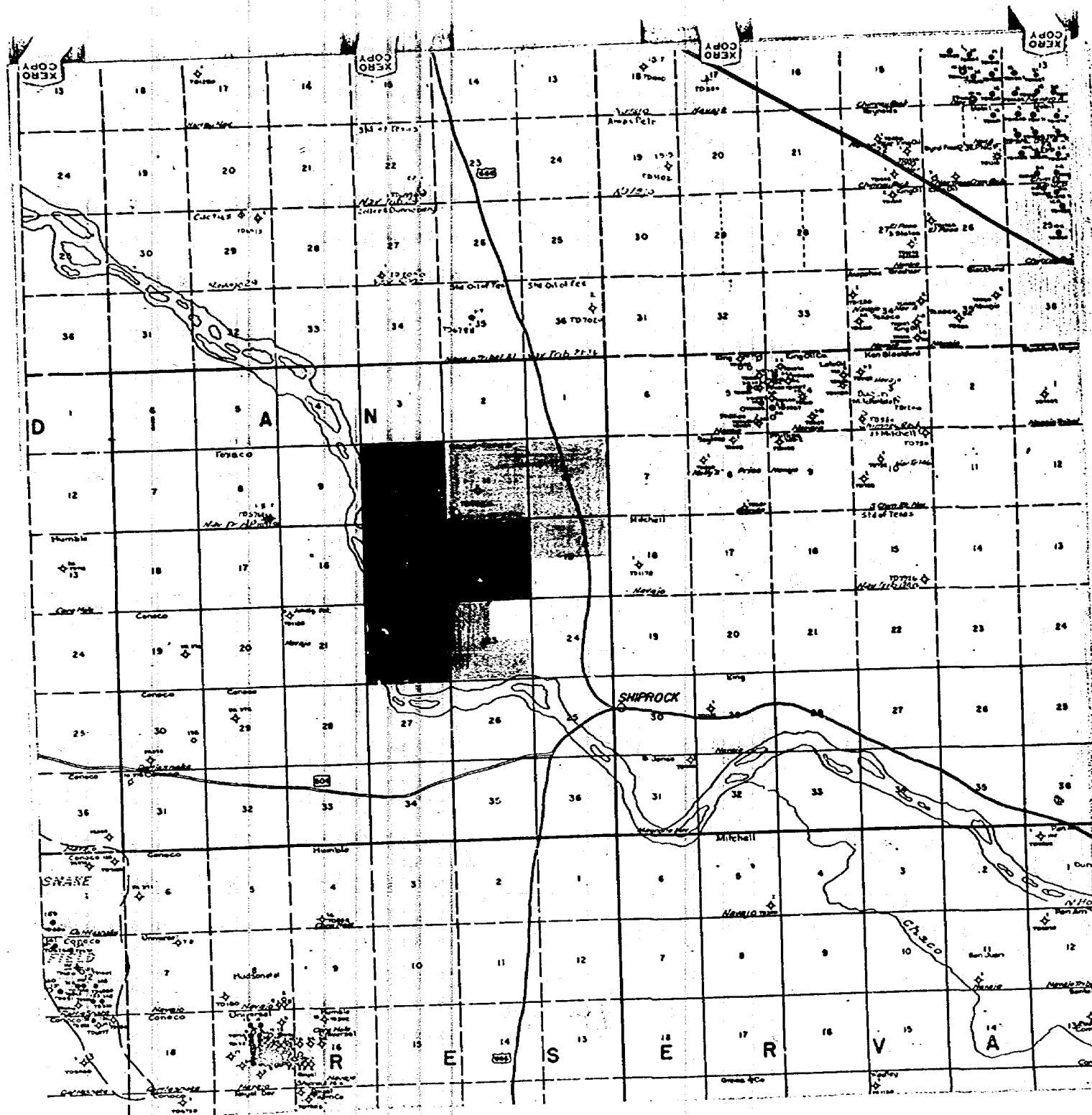
Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 7
CASE NO. 13278

- ☒ Thomas A. Dugan Shiprock Lease
- ☒ Texaco
- ☒ Chevron Oil Co.

Post Office Box 234
Zip Code 87401

THOMAS A. DUGAN

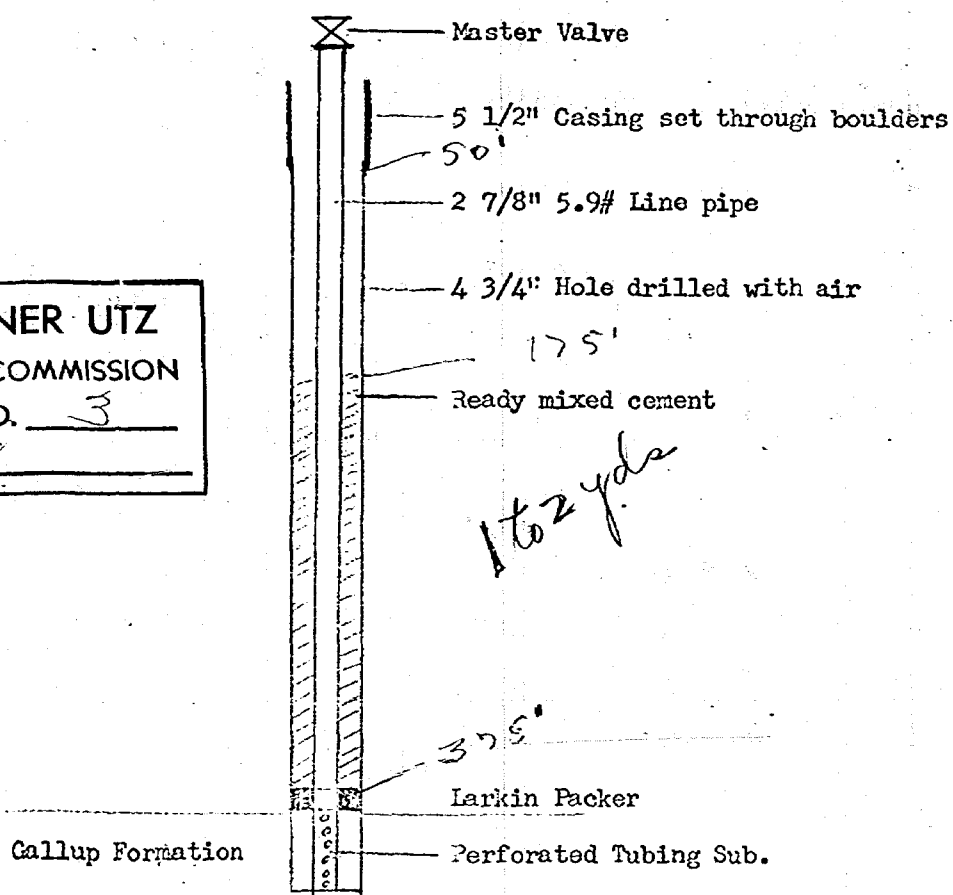
Registered Professional Engineer

709 BLOOMFIELD RD.
FARMINGTON, NEW MEXICO

TELEPHONE: 325-9184
Area Code 505

SKETCH OF DEVELOPMENT WELL COMPLETION Shiprock Lease

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Copy EXHIBIT NO. 3
CASE NO. 3598



(-) Create a new pool in San Juan County, New Mexico, classified as a gas pool for Gallup production, designated as the Salt Creek - Gallup Pool and described as:

Township 30N, R18W, NMPM, Section 14: All

Discovery Well:

Thomas A. Dugan #3 Shiprock
A-14-30N-18W
CAOF 440 MCFPD, SICP 166 psig
Completed: 11-2-66
Top Perforation: 388-398

*Copy for Pool,
160 A c. present.*

Development Well:

Thomas A. Dugan #5 Shiprock
G-14-30N-18W
CAOF 1250 MCFPD, SICP 166 psig

Development Well:

Thomas A. Dugan #7 Shiprock
C-14-30N-18W
CAOF 607 MCFPD, SICP 166 psig

Development Well:

Thomas A. Dugan #8 Shiprock
I-14-30N-18W
CAOF 2600 MCFPD, SICP 164 psig

| | |
|-----------------------------|------|
| BEFORE EXAMINER UTZ | |
| OIL CONSERVATION COMMISSION | |
| EXHIBIT NO. | 4 |
| CASE NO. | 3598 |

Thomas A. Dugan

Shiprock Lease

| Well Number | Well Location | Total Depth | Producing Interval | Shut in Pressure | CAOF MCFPD | Date Completed | Depth Set |
|----------------|------------------|----------------|-----------------------|---------------------|---------------|-------------------|--|
| 3 | A-14-30N-18W | 1028 | 388-398 | 166 | 440 | 11-2-66 | 27 7/8" Set. <i>surface</i> |
| 5 | G-14-30N-18W | 387 | 378-387 | 166 | 1250 | 3-1-67 | 395' <i>Discovery Well</i> |
| 7 | C-14-30N-18W | 380 | 363-380 | 166 | 607 | 5-13-67 | 387' <i>17.5'</i> |
| 8 | I-14-30N-18W | 395 | 389-395 | 164 | 2600 | 4-21-67 | 380' <i>T.C. 180'</i> 395' <i>T.C. Cored</i> <i>OK</i> |

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Agape EXHIBIT NO. *5*
CASE NO. *3598*

Estimation of Reserves

Shiprock Lease

Sec. 14, T30N, R13W,
San Juan County, New Mexico
Gallup Formation

| | |
|--|-------------|
| Acres in lease | 640 Acres |
| Reservoir estimated size | 320 Acres. |
| Royalty interest | 16 2/3 % |
| Average absolute open flow of wells | 1,160 MCFD |
| Average depth of wells | 390 Feet |
| Gas gravity | 0.617 |
| Net sand thickness | 12 Feet |
| Average porosity of sand | 21.2 % |
| Water saturation of sand | 30 % |
| Oil saturation of sand | 5 % |
| Bottom hole pressure | 179 psia |
| Reservoir temperature | 78° F |
| Compressibility factor | 0.9930 |
| Gas per acre-foot originally in place | 70.5 MCF |
| Gas per acre-foot at 50 psi abandonment pressure | 19.6 MCF |
| Recoverable gas per acre-foot | 50.9 MCF |
| Recoverable gas per acre | 610.8 MCF |
| Recoverable gas in reservoir | 195,456 MCF |

BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION

EXHIBIT NO. 6

CASE NO. 3578