

CASE 4192: Application of SOUTH-
WEST PRODUCTION FOR AN UNORTHODOX
GAS WELL LOCATION, CHAVES COUNTY.

Case Number.

4192

Application

Transcripts.

Small Exhibits

ETC.

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

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 27, 1969

IN THE MATTER OF:

Application of Southwest Production)
Corporation for an unorthodox gas)
well location, Chaves County,)
New Mexico.)

Case No. 4192

BEFORE: Elvis A. Utz
Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 4192.

MR. HATCH: Application of Southwest Production Corporation for an unorthodox gas well location, Chaves County, New Mexico.

MR. EATON: Paul W. Eaton, Jr., of the firm of Hinkle, Bondurant and Christy, Roswell, New Mexico, representing the Applicant and we have one witness, Mr. H. Lee Harvard.

MR. UTZ: Any other appearances?

(Witness sworn.)

(Whereupon, Applicant's Exhibits Nos. 1, 2 and 3 marked for identification.)

* * * * *

H. L E E H A R V A R D, a witness, called by the Applicant, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. EATON:

Q Would you state your name and residence, please?

A H. Lee Harvard, Roswell, New Mexico.

Q What is your occupation and the name of your employer?

A I am the Exploration Manager for Southwest

Production Corporation.

Q What is your professional background?

A I am a Geologist. I was graduated from the University of Texas in 1955. I was with the Sinclair Oil Company for five years, and then Consulting Geologist and also this capacity as an Exploration Manager.

Q Have you previously testified before the Oil Commission --

A Yes, I have.

Q -- in that capacity?

A Yes, I have.

MR. EATON: Are the witness's qualifications acceptable?

MR. UTZ: Yes, sir.

Q (By Mr. Eaton) Southwest Production Corporation seeks approval for an unorthodox gas well location in the Buffalo Valley Pennsylvanian Gas Pool of Chaves County. Are you aware, Mr. Harvard, that the present Pool Rules require wells to be located either in the northwest quarter or the southeast quarter of a section?

A Yes, I am.

Q What does Southwest Production seek in this particular case by its application?

A We seek approval for an unorthodox gas location in the northeast quarter of Section 35, 14 South, 27 East, specifically to be located 1650 feet from the north line and 990 feet from the east line of the section.

Q Mr. Harvard, would you refer to what has been marked as Exhibit 1 and please state what that represents?

A Exhibit 1 is a land map showing the lease ownership in the Buffalo Valley Gas Pool and also the surrounding acreage. It also shows the producing wells -- there are 6 producing wells in the field and the dry hole surrounding the field, in Section 36, the northeast quarter --

Q Northwest quarter?

A -- northwest quarter, shows a dry hole, the Charles B. Read Hondo State which penetrated the Pennsylvanian, Lower Pennsylvanian Sands Formation, shows the location that we seek approval for, to be called the Buffalo Valley "Com" No. 2, which is red-circled. It also shows a producing gas well in the northeast of Section 35 which is the Southwest Production Buffalo Valley "Com" No. 1 Well, and the southwest quarter of Section 35 shows a producing gas well, the Cities Service No. 1 Bates Well, and then the other four producing wells to the south.

Q The acreage outlined in yellow is the acreage of

Southwest Production?

A That's right.

Q Now, the existing gas well in the northeast quarter of Section 35 which is designated as your No. 1 Well, that is at an unorthodox location at this time, is it not?

A That's right.

Q And that unorthodox location was previously approved by this Commission in Case No. 3639, was it not?

A That's right.

MR. UTZ: What was that number again?

MR. EATON: 3639. Mr. Examiner, we ask that the Commission take administrative notice of that case and that the evidence in that case be considered by the Commission in this case.

MR. UTZ: The Chairman will so do.

Q (By Mr. Eaton) Now, the well of Cities Service in the southwest quarter of Section 35 is also at an unorthodox location, is it not?

A That's right.

Q Are all other wells in the pool at orthodox locations?

A Yes, they are.

Q Now, in connection with your No. 2 Well, which is

circled in red and which is the subject of this application, have you already started to drill that well?

A Yes, we have.

Q What is the approximate depth of the well at this time?

A We are drilling at an approximate depth of 8,070 feet.

Q Why did you start that well without prior Commission approval?

A We were not aware that we needed approval again, for an unorthodox location, since we had received approval for the Buffalo Valley "Com" No. 1 Well, we had assumed that we had the approval for an unorthodox location in an unorthodox quarter section, and thought this was sufficient.

Q Would you give the history of the No. 1 Well in the northeast quarter?

A Yes. The No. 1 Well was spudded September 13, 1967; drilling was completed October the 3rd of '67 and then the well was officially completed February the 7th, 1968. During the drilling of the well, we drillstem tested the Pennsylvanian, the Lower Pennsylvanian Sands and recovered gas at the volume of 1,750,000 cubic feet per day. After completion, and incidentally this well was drilled with

drilling mud and completed conventionally. After completion, we were never able to recover this volume of gas any more and this well has never responded to any treatment. We have acidized and fractured the formation and have never been able to recover a sufficient, or commercial amount of gas.

Q Then would you say that the No. 1 Well cannot at this time adequately drain the north half of Section 35?

A No, it cannot.

Q Would you please explain the structure from which the Buffalo Valley Pool wells are producing? And in that connection you might refer to Exhibits 2 and 3.

A Exhibit 2 is a structure map contoured on the top of the Atoka Formation and the Atoka Sands are the producing formation. This is a strand-line type of deposition with possibly sand bar and possibly some channeling affecting the development of the sands. The structural trends or the strike of the sands are approximately -- are generally north-south as indicated by the structure map.

Exhibit No. 3 is an isopack of the Atoka Formation and it shows the thickness of the Atoka Formation taken from the thickness from the top of the Atoka Formation to the top of the Mississippe and Limestone.

Q On Exhibits 2 and 3, your Buffalo Valley "Com" Wells No. 1 and No. 2 are reflected, are they not?

A Yes, they are. The thickness of the sand in the Buffalo "Com" No. 1 is approximately 310 feet. The No. 2 location, the sands should be slightly thicker but essentially over the entire north half of Section 35 the sands are the formation, not the sands because this thickness includes both sand and shell. This is a gross interval but the interval should be approximately the same, 300 to 350 feet.

Q Now, if the No. 2 Well were drilled in an orthodox location, that is, in the northwest quarter of Section 35, what effect, if any, would it have on the Cities Service well in the southwest quarter?

A Assuming we would have a good completion, we would more than likely drain part of the acreage dedicated to Cities Service.

Q Assuming that No. 2 Well were drilled in an orthodox location, in your opinion, would the No. 2 Well and the Cities Service well effectively drain all of this Section 35?

A No. No, they would not, in my opinion.

Q Now, if the proposed unorthodox location is

approved, do you believe that your No. 2 Well and the Cities Service well are satisfactorily located so that they can effectively drain all of this section?

A Yes, I feel that's true.

Q Mr. Harvard, at the time the original unorthodox location for your No. 1 Well was approved, how many wells were in existence in this field?

A Two wells, the Cities Service Bates No. 1 in the southwest 35 and the Charles B. Read Buffalo Valley No. 1 in the northwest of Section 2, 15, 27.

Q Since that time some four or five additional wells have been drilled?

A That's right, our well and four others -- three others, excuse me.

Q Has the subsequent development reflected or given any data or information which would suggest that the original unorthodox location for your No. 1 Well should not have been granted?

A No, they have not.

Q Have you notified all of said operators of your application?

A Yes, we have.

Q Have any of them indicated opposition to the proposed unorthodox location?

A No, they have not.

Q In your opinion, will the proposed unorthodox location give Southwest Production the opportunity to produce its fair share of the gas which is in place?

A Yes, it will.

Q Will the proposed location be detrimental to the rights of any offset operators?

A No, it will not, in my opinion.

Q Have these exhibits been prepared either by you or under your supervision?

A Yes, they have.

MR. EATON: That's all the questions we have on Direct Examination, Mr. Utz. We move that Exhibits 1, 2 and 3 be admitted into evidence.

MR. UTZ: Without objection, Exhibits 1, 2 and 3 will be entered into the record of this case.

(Whereupon, Exhibits 1, 2 and 3 offered and admitted in evidence.)

MR. UTZ: Any questions?

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Harvard, in your opinion, what's the matter with the No. 1 Well, that it won't produce?

A The Atoka Sands are very susceptible to fluid damage

and as I mentioned earlier this well was drilled with fluid and completed conventionally and we feel that the well was damaged beyond repair by the fluid that was injected into the formation. Our No. 2 Well we will complete in a different manner. We plan to set up casings above the pay, our production casing above the pay, and then drill into the pay with natural gas which will prevent, or keep, any fluid from touching or affecting the formation of the pay. We used this method of completion on our Clements Buffalo Well, which is located in Section 1 of 15, 27 and we are quite satisfied with this method and feel that where you do have good control that it is the way to complete the wells.

Q The formation is dry enough that you can drill with gas satisfactorily, then?

A Yes, that's right.

Q The No. 1 Well, just what happened to it?

A I think that, well, possibly that also the fluid even though it would be just, maybe just fresh water, would affect the clays and the silts in the sandstone and these clay particles obviously swell and cut down your permeability and your porosity enough so that you cannot effectively drain the formation.

Q How much pay would you have in No. 1 Well?

A Approximately 16 feet of net pay and over about a 30-foot interval, gross interval.

Q Judging from your Exhibit No. 2, production does not necessarily follow the contour line. Is that true?

A No, it does not. We have dry holes. The formation is erratic. Also, I think one thing that has entered in is that some of these wells have been drilled in with fluid and although they have had shows of gas and good pressure they were non-commercial in the operators' opinion.

Q In your opinion, is the north half of 35 productive, entirely productive of gas?

A Yes, I think it is in my opinion, and apparently other people share this opinion. I understand there are other wells to be drilled in the area west of Section 35; of course, this is just a rumor, but apparently other people feel the same way.

Q There appears to be no one here to object, does there?

A No, sir.

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

(Witness excused.)

MR. UTZ: Any statements?

MR. HATCH: The Commission has received telegrams from Ernest A. Hansen and from Cities Service Oil Company offering no objections.

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

I N D E X

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STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, WAYNE FLORES, Court Reporter 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.

Maureen Flores
Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4192, heard by me on August 22, 1969.

Richard A. [Signature], Examiner
New Mexico Oil Conservation Commission

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. 4192
Order No. R-3830

APPLICATION OF SOUTHWEST PRODUCTION
CORPORATION FOR AN UNORTHODOX GAS WELL
LOCATION, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 27, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 8th day of September, 1969, 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, Southwest Production Corporation,
seeks authority to drill its Buffalo Valley "Com" Well No. 2
at an unorthodox gas well location 1650 feet from the North line
and 990 feet from the East line of Section 35, Township 14 South,
Range 27 East, NMPM, Buffalo Valley-Pennsylvanian Gas Pool, Chaves
County, New Mexico, in exception to the provisions of Rule 2 of
Order No. R-1670-H.

(3) That the Special Rules and Regulations governing the
Buffalo Valley-Pennsylvanian Gas Pool provide that each well
completed or recompleted in said pool shall be located in the
northwest quarter or the southeast quarter of the section and
shall be located no nearer than 990 feet to the outer boundary
of the quarter section nor nearer than 330 feet to any govern-
mental quarter-quarter section line.

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CASE No. 4192

Order No. R-3830

(4) That the proposed location, in the northeast quarter of said Section 35, is an off-pattern quarter section location.

(5) That the evidence indicates that a well drilled at the proposed non-standard location in the northeast quarter of said Section 35 should encounter a more permeable section of the Pennsylvanian sand than a well drilled at a standard location in the northwest quarter of said section and should, therefore, result in greater ultimate recovery of gas, thereby preventing waste.

(6) That approval of the proposed unorthodox location will not violate correlative rights and will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and otherwise prevent waste.

IT IS THEREFORE ORDERED:

(1) That the applicant, Southwest Production Corporation, is hereby authorized to drill its Buffalo Valley "Com" Well No. 2 at an unorthodox location 1650 feet from the North line and 990 feet from the East line of Section 35, Township 14 South, Range 27 East, NMPM, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico.

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

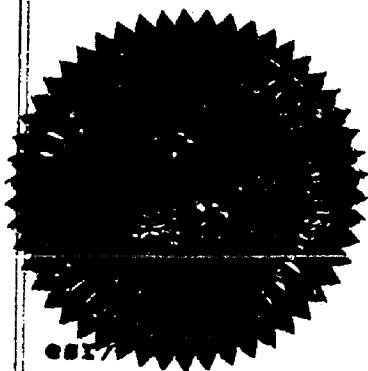
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


ALEX J. AMELIO, Member


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



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CASE No. 3639

Order No. R-3301

(5) That the evidence indicates that a well drilled at the proposed non-standard location in the northeast quarter of said Section 35 should encounter a more permeable section of the Pennsylvanian Sand than a well drilled at a standard location in the northwest quarter of said section and should, therefore, result in greater ultimate recovery of gas, thereby preventing waste.

(6) That approval of the proposed unorthodox location will not violate correlative rights and will afford the applicant the opportunity to produce his just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and otherwise prevent waste.

IT IS THEREFORE ORDERED:

(1) That the applicant, Myles A. Colligan, is hereby authorized to drill a gas well in the Buffalo Valley-Pennsylvanian Gas Pool at an unorthodox location 1650 feet from the North line and 1650 feet from the East line of Section 35, Township 14 South, Range 27 East, NMPM, Chaves County, New Mexico.

(2) 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, Chairman

GUYTON B. HAYS, Member

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

S E A L

esr/

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. 3639
Order No. R-3301

APPLICATION OF MYLES A. COLLIGAN
FOR AN UNORTHODOX LOCATION, CHAVES
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 23, 1967, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 29th day of August, 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, Myles A. Colligan, seeks authority to drill a gas well in the Buffalo Valley-Pennsylvanian Gas Pool at an unorthodox location 1650 feet from the North line and 1650 feet from the East line of Section 35, Township 14 South, Range 27 East, NMPM, Chaves County, New Mexico, in exception to the provisions of Rule 2 of Order No. R-2349.

(3) That the Special Rules and Regulations governing the Buffalo Valley-Pennsylvanian Gas Pool provide that each well completed or recompleted in said pool shall be located in the northwest quarter or the southeast quarter of the section and shall be located no nearer than 990 feet to the outer boundary of the quarter section nor nearer than 330 feet to any governmental quarter-quarter section line.

(4) That the proposed location, in the northeast quarter of said Section 35, is an off-pattern quarter section location.

4192

Heard 8-27-69

Rec. 8-29-69

Grant SW Prod. authority
to drill on NSL in the Buffalo
Valley - Perm. Gas Pool.
The well is their 'Buffalo Valley
'Com' unit # 2, 1650 / N-990 / E
line sec 35-14S-27E.

Thurston

CASE 4194 - Continued from Page 1 -

seeks authority to inject gas through two additional wells located in Unit L of Section 34, Township 17 South, Range 35 East and Unit B of Section 4, Township 18 South, Range 35 East and to expand said project area to include the SE/4 NE/4 of Section 33 and the NW/4, N/2 SE/4, and SW/4 SE/4 of Section 34 Township 17 South, Range 35 East. Applicant further seeks authority to dually complete all gas injection wells in the project in such a manner as to permit the production of oil from the lower section of the Abo Reef through tubing and the injection of gas into the upper section of the Abo Reef through the casing-tubing annulus.

CASE 4195: Application of Continental Oil Company for eight non-standard gas proration units and a non-standard gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the rededication of acreage to establish the eight following non-standard gas proration units in Township 20 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico:

A 120-acre non-standard unit comprising the SE/4 NE/4 and E/2 SE/4 of Section 14, to be dedicated to the "SEMU" Well No. 46, located in Unit D of said Section 14;

A 240-acre non-standard unit comprising the NE/4 and E/2 SE/4 of Section 26, to be dedicated to the "SEMU" Well No. 64, located in Unit G of said Section 26;

A 560-acre non-standard unit comprising the W/2 and W/2 SE/4 of Section 26 and the E/2 E/2 of Section 27, to be dedicated to the "SEMU" Well No. 65, located in Unit L of said Section 26;

A 640-acre non-standard unit comprising the W/2 and the W/2 E/2 of Section 14 and E/2 E/2 of Section 15, to be dedicated to the "SEMU" Well No. 66, located in Unit L of said Section 14;

DOCKET No. 24-69

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 27, 1969

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 4191: Application of Gulf Oil Corporation for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4408 feet to 4415 feet in its Roosevelt "AN" State Well No. 3 located in the NW/4 SE/4 of Section 32, Township 7 South, Range 36 East, adjacent to the Todd-Lower San Andres Pool, Roosevelt County, New Mexico.

CASE 4192: Application of Southwest Production Corporation for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Buffalo Valley "Com" Well No. 2 at an unorthodox location 1650 feet from the North line and 990 feet from the East line of Section 35, Township 14 South, Range 27 East, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, in exception to the provisions of Rule 2 of the special rules for said pool.

CASE 4193: Application of Humble Oil & Refining Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Bowers "A" Federal Com 33 Well No. 33 located in Unit D of Section 29, Township 10 South, Range 30 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Hobbs (Grayburg-San Andres) Pool and the Hobbs-Blinbry Pool through parallel strings of tubing.

CASE 4194: Application of Phillips Petroleum Company for an amendment of Order No. R-3181 and dual completions, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3181, which order established special rules regulating the operation of the Phillips Petroleum Company Vacuum Abo Pressure Maintenance Project, Vacuum-Abo Reef Pool, Lea County, New Mexico. Applicant

CASE 4197 - Continued from Page 3 -

Applicant now seeks authority to locate said well at an unorthodox location 1980 feet from the North line and 1450 feet from the West line of said Section 35 in the Forest (San Andres) Pool.

CASE 4198: Application of Continental Oil Company for amendment of Order No. R-3487, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3487 which authorized the applicant to utilize its Eaves "A" Well No. 10, located in Unit P of Section 19, Township 26 South, Range 37 East, Scarborough Yates-Seven Rivers Pool, to dispose of salt water into the Seven Rivers formation in the interval from 3208 feet to 3255 feet. Applicant now seeks authority to inject produced salt water into the Yates and Seven Rivers formations in the perforated and open-hole interval from approximately 3107 feet to 3410 feet in said well and the reclassification of said salt water disposal well to a pressure maintenance injection well.

CASE 4199: Application of Burleson & Huff for compulsory pooling and a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Jalmat Gas Pool underlying the SE/4 of Section 28, Township 25 South, Range 37 East, Lea County, New Mexico. Said 160-acre non-standard gas proration unit to be dedicated to the Burleson & Huff "Cook" Well No. 2, a recompleted well, located 660 feet from the South and East lines of said Section 28. Also to be considered will be the costs of drilling and/or recompleting said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4200: Application of Burleson & Huff for compulsory pooling and a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Jalmat Gas Pool underlying the NE/4 of Section 29, Township 25 South, Range 37 East, Lea County, New Mexico. Said 160-acre non-standard gas proration unit to be dedicated to a well,

CASE 4195 - Continued from Page 2 -

A 320-acre non-standard unit comprising the SE/4, S/2 NE/4, and E/2 SW/4 of Section 24, to be dedicated to the "SEMU" Well No. 67, located in Unit K of said Section 24;

A 640-acre non-standard unit comprising the E/2 and E/2 W/2 of Section 23 and W/2 W/2 of Section 24, to be dedicated to the "SEMU" Well No. 38, located in Unit J of said Section 23;

An 80-acre non-standard unit comprising the E/2 NW/4 of Section 24, to be dedicated to the "SEMU" Well No. 69, located in Unit F of said Section 24;

A 320-acre non-standard unit comprising the E/2 E/2 of Section 22 and the W/2 W/2 of Section 23, to be dedicated to the "SEMU" Well No. 90, to be completed at a non-standard location 660 feet from the South and East lines of said Section 22.

CASE 4196: Application of Continental Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of three existing non-standard gas proration units into one 360-acre non-standard unit comprising the W/2 and the NW/4 NE/4 of Section 18, Township 23 South, Range 37 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its Stevens "B" Wells Nos. 15 and 16, located in Units F and K, respectively, of said Section 18. Applicant further seeks authority to produce the allowable assigned to said unit from either of the aforesaid wells in any proportion.

CASE 4197: Application of Continental Oil Company for an amendment to Order No. R-3755, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3755 which authorized, among other things, the drilling of a water injection well in the Forest Donahue Waterflood Project area at a location 1980 feet from the North line and 1650 feet from the West line of Section 35, Township 16 South, Range 29 East, Eddy County, New Mexico.

CASE 4204 - Continued from Page 5 -

and unorthodox locations in Sections 3 and 4, Township 25 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico. Applicant further seeks a procedure whereby additional injection wells at orthodox and unorthodox locations may be approved for said project administratively.

CASE 4205: Application of Tesoro Petroleum Corporation for four unorthodox injection well locations and amendment of Order No. R-2807, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to inject water into the Hospah Upper Sand Oil Pool in its Hospah Unit Waterflood Project Area through four additional injection wells at unorthodox locations in Section 36, Township 18 North, Range 9 West, McKinley County, New Mexico, said wells to be located as follows:

Well No. 62 located 1900 feet from the South line and 1140 feet from the West line;

Well No. 63 located 1980 feet from the North line and 2310 feet from the West line;

A well to be drilled 1430 feet from the South line and 2625 feet from the East line;

A well to be drilled 30 feet from the South line and 2350 feet from the East line.

Applicant further seeks the amendment of Order No. R-2807, which order authorized the aforesaid waterflood project, to establish a procedure whereby additional injection wells at unorthodox locations, as may be necessary to complete an efficient injection pattern, may be approved administratively.

CASE 4206: Application of Shell Oil Company for an unorthodox oil well location and amendment to Order No. R-2538, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing oil well at an unorthodox location 1315 feet from the North line and 2625 feet from the West line of Section 34, Township 19

CASE 4200 - Continued from Page 4 -

to be recompleted, located 660 feet from the East line and 1980 feet from the North line of said Section 29. Also to be considered will be the costs of drilling and/or recompleting said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4201: Application of Mobil Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Langlie-Mattix Queen Unit Area comprising 1120 acres, more or less, of federal and fee lands in Sections 10, 11, 14, 15, 22, and 23, Langlie-Mattix Pool, Lea County, New Mexico.

CASE 4202: Application of Mobil Oil Corporation for a waterflood project and unorthodox injection well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Langlie-Mattix Queen Unit Area by the injection of water into the Queen sand through 17 wells at orthodox and unorthodox locations in Sections 10, 11, 14, 15, 22, and 23, Township 25 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico. Applicant further seeks a procedure whereby additional injection wells at orthodox and unorthodox locations may be approved for said project administratively.

CASE 4203: Application of Mobil Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Humphrey Queen Unit Area comprising 761 acres, more or less, of federal and fee lands in Sections 3 and 4, Township 25 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico.

CASE 4204: Application of Mobil Oil Corporation for a waterflood project and unorthodox injection well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Humphrey Queen Unit Area by the injection of water into the Queen sand through 11 wells at orthodox

CASE 4208 - Continued from Page 7 -

several waterflood projects by the injection of water into the Seven Rivers formation through his Mary Lou Well No. 1 located in Unit H of Section 29 and his Caroline Well No. 4 located in Unit E of Section 28, both in Township 19 South, Range 28 East, East Millman-Seven Rivers Pool, Eddy County, New Mexico.

CASE 4209: Application of Harvey E. Yates Company of Artesia for several pressure maintenance projects, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute several pressure maintenance projects by the injection of water into the Seven Rivers and Queen formations, McMillan (Seven Rivers-Queen) Pool, Eddy County, New Mexico, through the following-described wells in Township 20 South, Range 27 East:

Page & Yates Well No. 8 - Unit M - Section 5
Page & Yates Well No. 6 - Unit I - Section 6
Page & Yates Well No. 7 - Unit J - Section 6
Lillie Yates Well No. 2 - Unit B - Section 7

CASE 4206 - Continued from Page 6 -

South, Range 35 East, as an infill well in its East Pearl-Queen Unit Waterflood Project area, East Pearl-Queen Pool, Lea County, New Mexico. Applicant further seeks the amendment of Order No. R-2538, which order authorized the aforesaid waterflood project, to establish a procedure whereby additional producing wells at unorthodox infill locations in the aforesaid project area, as may be necessary to complete an efficient producing pattern, may be approved administratively.

CASE 4207: Application of C. W. Trainer and DEL-LEA, Inc., for an unorthodox gas well location, Lea County, New Mexico. Applicants, in the above-styled cause, seek an exception to Rule 104 C II to permit the drilling of a well at an unorthodox gas well location 330 feet from the North line and 660 feet from the West line of Section 35, Township 12 South, Range 34 East, West Ranger Lake-Devonian Gas Pool, Lea County, New Mexico. The N/2 of said Section 35 to be dedicated to the well.

CASE 4186: (Readvertised)

Application of Tenneco Oil Company for compulsory pooling and an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Basin-Dakota Gas Pool underlying the North half of Section 11, Township 29 North, Range 13 West, San Juan County, New Mexico. Said acreage to be dedicated to a well to be drilled at an unorthodox gas well location 2250 feet from the North line and 600 feet from the East line of said Section 11. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well. In the absence of a valid objection an order will be issued upon the record entered in the subject case August 6, 1969.

CASE 4208: Application of John A. Yates of Artesia for several waterflood projects, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute



Telegram

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HENSON OIL CO, EXAMINER DOCKET 2469 1909 AUG 26 AM 10 51

NEW MEXICO OIL CONSERVATION COMMISSION
STATE LAD OFFICE BLDG SANTA FE NMEX=

RE CASE 4192: WE, AS LEASE OWNERS OF THE NORTH OFFSETTING
ACREAGE, SUPPORT AND ENDORSE THE APPLICATION OF SOUTHWEST
PRODUCTION CORPORATION FOR AN UNORTHODOX GAS WELL LOCATION=

ERNEST A HENSON=

1909 AUG 26 AM 11 28

MAIN OFFICE 0-1

WU 1201 (R 5-00)



Telegram

LA053 NSA280

NS MDA035 RS PD=MIDLAND TEX 26 1037A CBT=

NEW MEXICO OIL AND GAS COMM=

SANTA FE NMEX=

1909 AUG 26 AM 11 00

ATTN ELVIS UIZ:

EXAMINER AUGUST 27TH HEARING: RE CASE 4192

1 THIS IS TO ADVISE THAT CITIES SERVICE OIL COMPANY
AS AN OFFSET OPERATOR HAS NO OBJECTION TO SOUTHWEST
PRODUCTION CORPORATION'S PROPOSED BUFFALO VALLEY "COM"
#2 1650 FEET FNL 990 FEL SECTION 35 T-145 R-27-4E CHAVEZ
COUNTY NEW MEXICO, SAID WELL BEING AN UNORTHODOX LOCATION
IN THE BUFFALO VALLEY PENNSYLVIAN GAS POOL=

SAM J MATTHEWS CITIES SERVICE OIL CO MGR
SOUTHWESTERN REGION PROD VJVN=

WU 1201 (R 5-00)



Telegram

LA039 330018

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EXAMINER-DOCKET 24-69

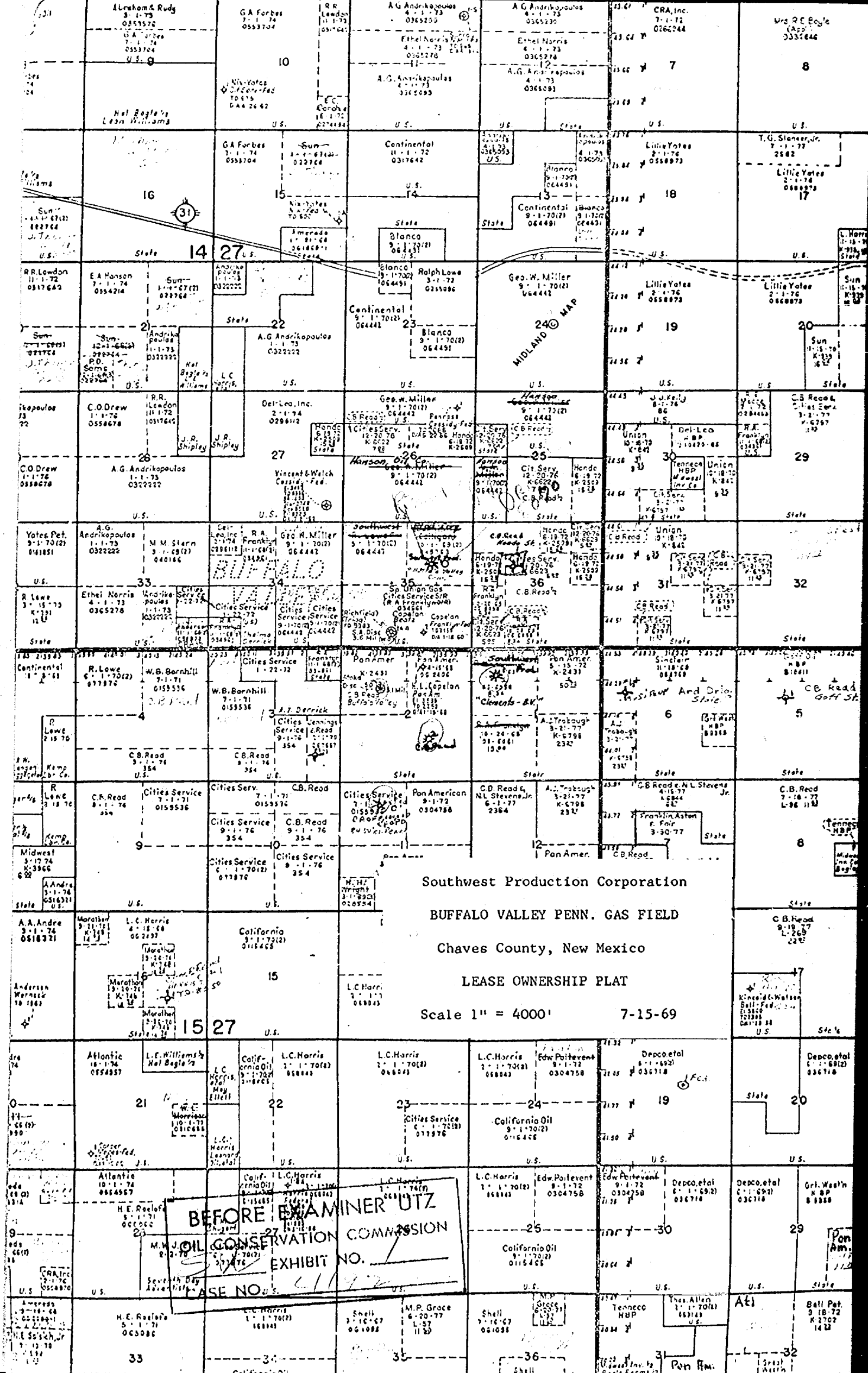
NEW MEXICO OIL CONSERVATION COMMISSION STATE LAND
BLDG SANTA FE NMEX

REGARDING CASE 4192 AS AN INTERESTED OWNER OFF SETTING
THE PROPOSED UNORTHODOX LOCATION PLEASE BE ADVISED THAT
WE HAVE NO OBJECTION TO THE PROPOSED LOCATION=

CHARLES B READ=

4192=

MAIN OFFICE 000
AUG 27 AM 10 30



SOUTHWEST PRODUCTION CORPORATION

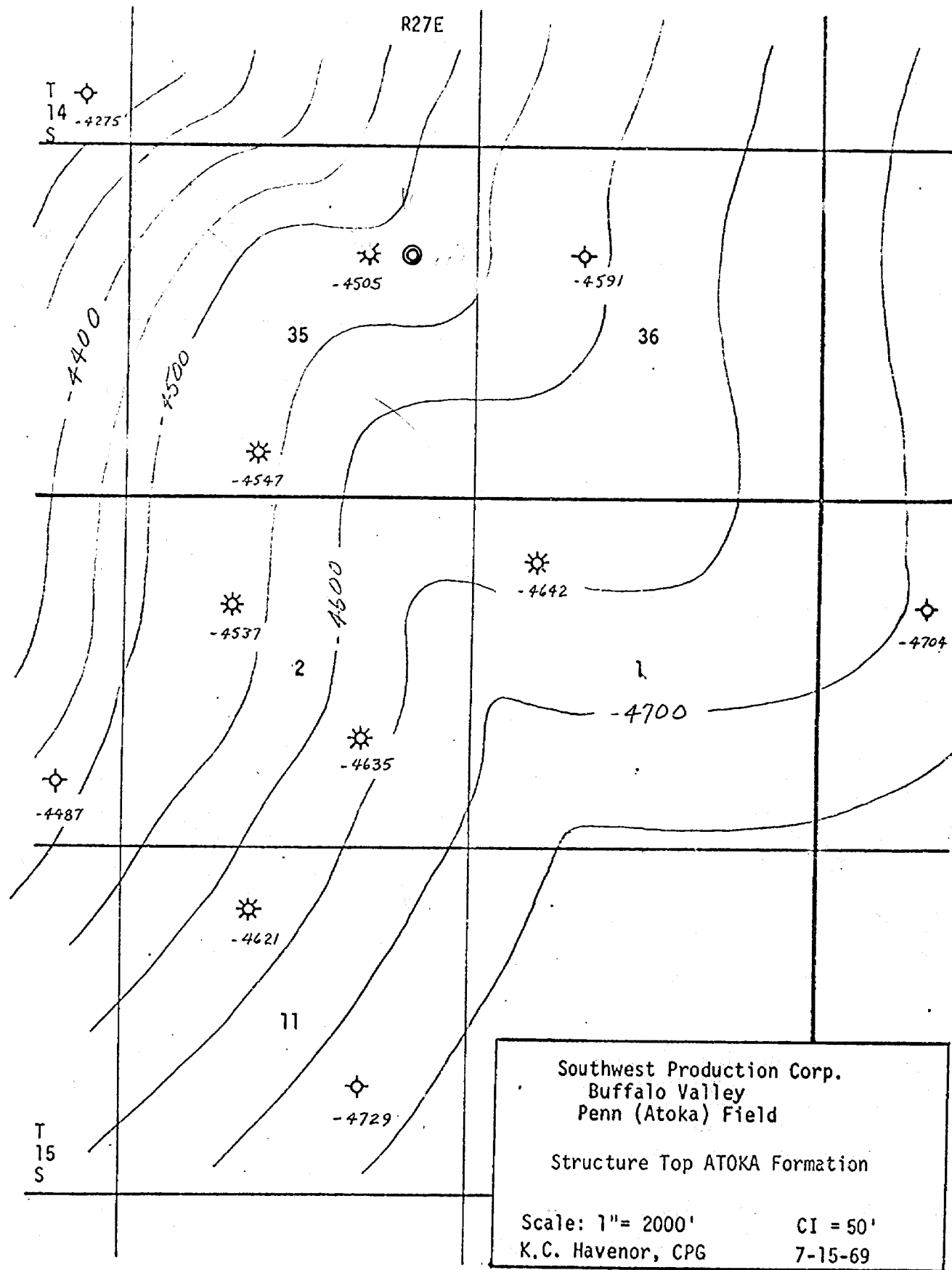
BUFFALO VALLEY PENN. GAS FIELD

CHAVES COUNTY, NEW MEXICO

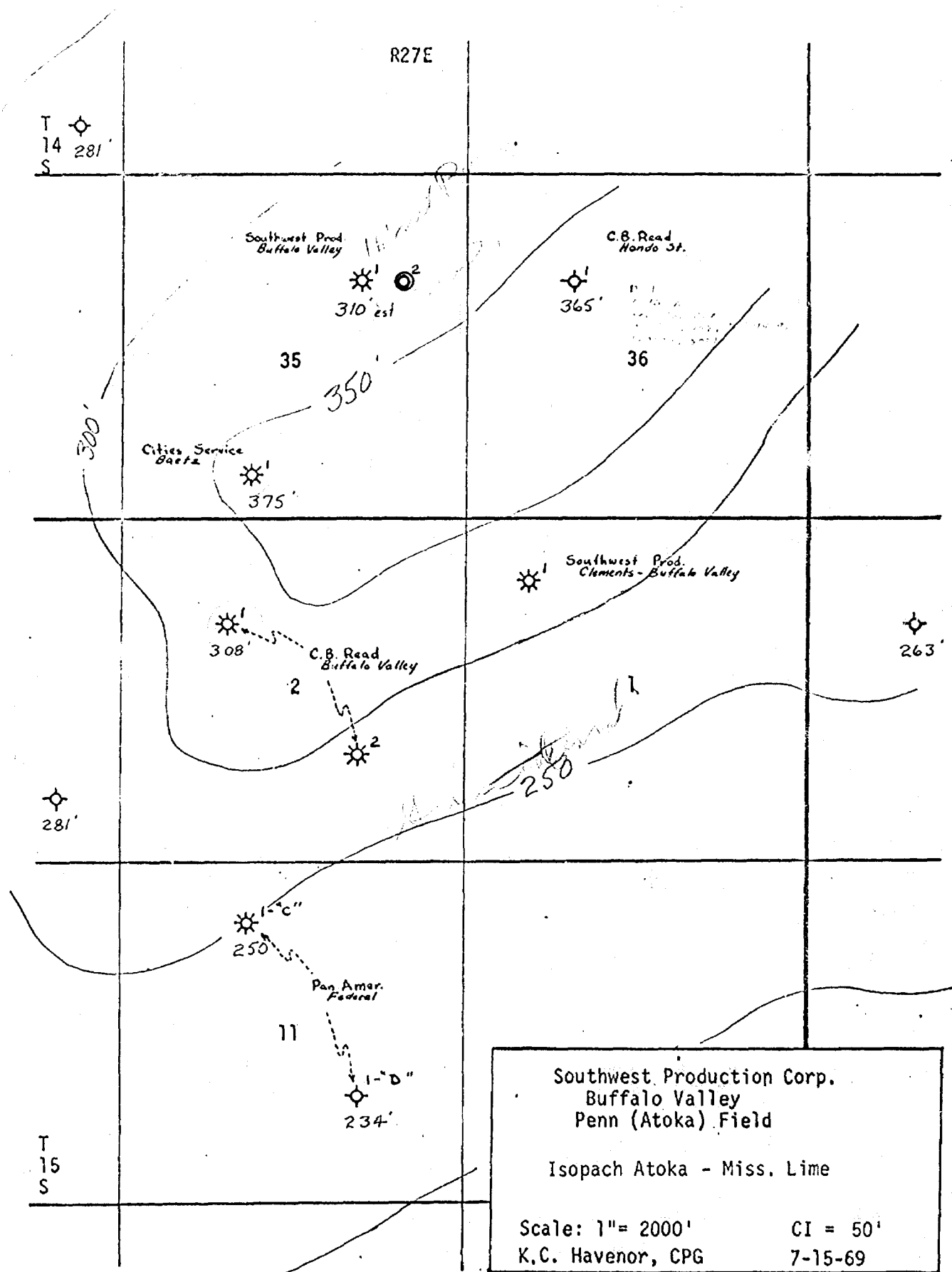
LEASE OWNERSHIP PLAT

Scale 1" = 4000' 7-15-69

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 11172
CASE NO. 11172



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 2
CASE NO. 4119



BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION

SU EXHIBIT NO. 3

CASE NO. 11172

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
S. B. CHRISTY IV
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENLEY, JR.
STUART D. SHANOR
C. O. MARTIN
PAUL J. KELLY, JR.

LAW OFFICES
HINKLE, BONDURANT & CHRISTY
600 HINKLE BUILDING
ROSWELL, NEW MEXICO 88201

August 22, 1969

69 AUG 25 AM 8 21

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) MU 3-4891

TELEPHONE (505) 622-6510
POST OFFICE BOX 10

New Mexico Oil Conservation
Commission
P. O. Box 2088
Santa Fe, New Mexico

Attention: Mr. George Hatch

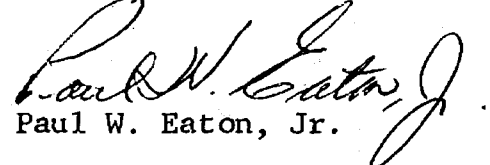
Re: Case No. 4192
Southwest Production Corporation

Gentlemen:

We enclose in triplicate the Application of Southwest Production Corporation for an unorthodox well location in the Buffalo Valley-Pennsylvanian gas pool, Chaves County, New Mexico.

Yours very truly,

HINKLE, BONDURANT & CHRISTY


Paul W. Eaton, Jr.

PWE/jw
Enclosure

cc: Southwest Production Corporation

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF SOUTHWEST PRODUCTION)
CORPORATION FOR AN UNORTHODOX)
LOCATION, CHAVES COUNTY, NEW MEXICO)

Case No. 4192

COMES NOW, Southwest Production Corporation and states:

1. Applicant is the operator of United States Oil and Gas Leases NM 064467 and NM 048768 covering N $\frac{1}{2}$ Section 35, Township 14 South, Range 27 East, N.M.P.M., Chaves County, New Mexico.

2. Applicant desires to drill a gas well in the Buffalo Valley-Pennsylvanian gas pool at an unorthodox location 1,650 feet from the North line and 990 feet from the East line of Section 35, Township 14 South, Range 27 East, N.M.P.M. as an exception to the provisions of Rule 2 of Order No. R-1670, as amended.

3. Applicant desires a hearing before an examiner as promptly as possible.

HINKLE, BONDURANT & CHRISTY

By

Paul W. Christy, Jr.
P. O. Box 10

Roswell, New Mexico

Attorneys for Southwest
Production Corporation

R-3301

By ~~to~~ ^{to} Aug 27, 1969

Newspaper

Case 4192

Application of Southwest Production Corporation for an unorthodox gas well location, Chaves County, New Mexico.

Applicant, in the above-styled cause, seeks authority to drill ^{its Buffalo Valley "Com" well no. 2} ~~a well~~ at an unorthodox location 1650 feet from the north line and 990 feet from the east line of Section 35, Township 14 South, Range 27 East, Buffalo Valley - Pennsylvanian Gas Pool, Chaves County, New Mexico in exception to ~~Rule~~ the provisions of Rule 2 of the special rules for said pool.

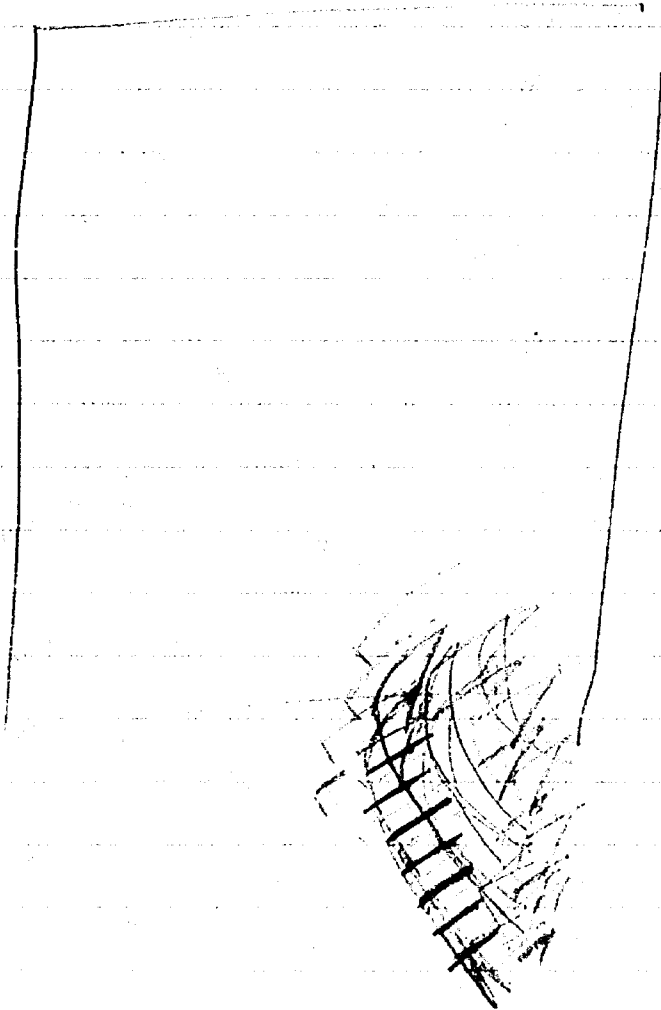
Southwest Production Corporation
for NSL

Buffalo Valley, Conn No. 2

1650 FNL 995 FFL of
Sec. 35, 14S, 27E

R-3301

Set for hearing on 127th
Aug.



DRAFT

GMH/esr

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. 4192

Order No. R-3830

APPLICATION OF SOUTHWEST PRODUCTION
CORPORATION FOR AN UNORTHODOX GAS WELL
LOCATION, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 27, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this September day of 1969, 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, Southwest Production Corporation,
seeks authority to drill its Buffalo Valley "Com" Well No. 2-
at an unorthodox gas well location 1650 feet from the North line
and 990 feet from the East line of Section 35, Township 14 South,
Range 27 East, NMPM, Buffalo Valley-Pennsylvanian Gas Pool, Chaves
County, New Mexico, in exception to the provisions of Rule 2 of
Order No. R-1670-H.

(3) That the Special Rules and Regulations governing the
Buffalo Valley-Pennsylvanian Gas Pool provide that each well
completed or recompleted in said pool shall be located in the
northwest quarter or the southeast quarter of the section and

shall be located no nearer than 990 feet to the outer boundary of the quarter section nor nearer than 330 feet to any governmental quarter-quarter section line.

(4) That the proposed location, in the northeast quarter of said Section 35, is an off-pattern quarter section location.

(5) That the evidence indicates that a well drilled at the proposed non-standard location in the northeast quarter of said Section 35 should encounter a more permeable section of the Pennsylvanian Sand than a well drilled at a standard location in the northwest quarter of said section and should, therefore, result in greater ultimate recovery of gas, thereby preventing waste.

(6) That approval of the proposed unorthodox location will not violate correlative rights and will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and otherwise prevent waste.

IT IS THEREFORE ORDERED:

(1) That the applicant, Southwest Production Corporation, is hereby authorized to drill its Buffalo Valley "Com" Well No. 2 at an unorthodox location 1650 feet from the North line and 990 feet from the East line of Section 35, Township 14 South, Range 27 East, NMPM, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico.

(2) 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.

CASE 4193: Application of HUMBLE
OIL & REFINING CO. FOR A DUAL
COMPLETION, LEA COUNTY.