

CASE 4361: Application of READ &
STEVENS FOR AN UNORTHODOX GAS
WELL LOCATION, CHAVES COUNTY.

Case Number

4361

Application
Transcripts.

Small Exhibits

ETC.

LAW OFFICES
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July 29, 1971

Mrs. Ida Rodriguez
New Mexico Oil Conservation
Commission
State Land Office Building
P. O. Box 2088
Santa Fe, New Mexico 87501

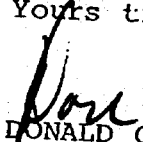
Re: Transcript of Case No. 4361

Dear Ida:

I am returning herewith the above transcript.

Thank you for the loan.

Yours truly,


DONALD G. STEVENS

DGS/da
encl.

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
May 27, 1970

EXAMINER HEARING

IN THE MATTER OF:)

Application of Read & Stevens for)
an unorthodox gas well location,)
Chaves County, New Mexico.)

) Case No. 4361
)

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 4361.

MR. HATCH: Case 4361, application of Read & Stevens for an unorthodox gas well location, Chaves County, New Mexico.

MR. STEVENS: Mr. Examiner, I am Don Stevens, McDermott, Connolly and Stevens, Attorneys for the applicant. We have two witnesses.

(Whereupon witnesses were sworn)

MR. STEVENS: Our first witness is Mr. LeMay.

MR. UTZ: May I ask if there are other appearances first, Don? Are there other appearances? You may proceed.

(Whereupon, Applicant's Exhibits 1 through 5 were marked for identification)

WILLIAM J. LeMAY,

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

DIRECT EXAMINATION

BY MR. STEVENS:

Q Would you state your name, residence and occupation, please.

A William J. LeMay, Consulting Geologist, Santa Fe, New Mexico.

Q Have you previously testified before the Commission?

A Yes, I have.

MR. STEVENS: Mr. Examiner, are the witness's

qualifications acceptable?

MR. UTZ: Yes, they are.

Q (By Mr. Stevens) Mr. LeMay, would you tell us what Read and Stevens seek by this application?

A Yes. Read and Stevens seek to drill an unorthodox location in the Buffalo Valley Field in Chaves County, New Mexico being specifically a location 990 feet from the south and west lines of Section 6, Township 15 South, Range 28 East. And by doing so, the field rules are set up such that the pattern location would be in the northwest corner and the southwest corner of the section.

This location would be standard as far as footage goes. You would be in the southwest quarter of the section.

Q I believe the rules state northwest and southeast quarters?

A Right.

Q Are they standard locations?

A Right.

Q What are the reasons, very summarily, why you would prefer the location in the southwest quarter?

A Well, as the exhibits will show, we hope to recover the gas under the west half of Section 6, the Ard Well being a mechanical failure on completion attempt and therefore the location in the south half of that 320 acres would supposedly

get better pay thickness and also better quality pay and also be a superior location to the one in the northwest corner.

Q Referring to Exhibit No. 1, could you describe what it is for the Commission?

A Yes. Exhibit No. 1 shows a breakdown of the acreage ownership and their operating rights and farmout agreements in the surrounding area of the subject location. Those acreages controlled by Read and Stevens through lease ownership, are indicated in pink, a dark pink, and also where Read and Stevens have assignments of operating rights in yellow, as the northeast 160 of Section 1 which is dedicated to their Troball Well and then also where Read and Stevens have farmout agreements. It is shown in flesh color or light pink, the proration unit for the proposed location.

The other operators involved in the field are Bryan Hill and Culligan, Clinton Oil, Aston, etcetera, all listed on the exhibit and color-coded accordingly.

Q To your knowledge, are any of the operators objecting to this application?

A To my knowledge, no, they are not.

Q Could you describe for us what is contained in Exhibit Number 2?

A Exhibit 2 is a structure map on top of the Atoka pay

or the Atoka formation. It is contoured on an interval of 50 feet and as exhibited by this exhibit, there is a strong nose in the northeast 160 of Section 35, 1427, but I think, in study of the field structure it's not important in trapping the gas. It is a stratigraphic trap and therefore, the structure map reflects the nose. It shows the various wells that fall on regional dip. Some of which are good and some of which are not, but the main purpose of the exhibit was to show the proposed location structurally with the other wells in the field.

Q In that conjunction, could you explain Exhibit 3 which I understand is also a structure map?

A Yes. Exhibit 3 is a structure map on top of the main pay sand in the Buffalo Valley Field and it shows basically what Exhibit 2 shows, that there is some steep dip in the northwest part of the field, but this dip becomes gradually less and less going to the southeast, the regional strike being roughly north, northeast, south southwest, again, the nose showing up in the vicinity of Section 35.

Exhibit 3 is contoured on 100 foot contour interval and therefore -- if you remember Exhibit 2 --

Q In your opinion, is there any effect on the structure of accumulation of gas in the west half of Section 6?

A No, there is not any structural factor at all contributing to the gas accumulation.

Q Could you describe for us the one in conjunction with the other Exhibits 4 and 5?

A Exhibits 4 and 5 are isopach maps, Exhibit 4 being an isopach map of the gross sand in the producing interval of the Morrow or Atoka formation. There is some question as to whether this is an Atoka or Morrow. I think most geologists would tend to call it Atoka although they are hard to differentiate.

The gross sand conforms fairly well with the net sand as far as geometry goes. There is a lobe of thick sand, both net and gross, in the vicinity of Section 25, South, Range 27 East and part of Section 15 South, 27 East.

There are some dry holes on that map, that are shown in Exhibit 5 which actually did recover shows of gas and these shows were used to control the net lines. The net pay interval thickness where there are plus signs indicated as in the northeast corner of Section 35; these have been open hole completions without logs run through the pay and without good sample control. The same occurs in other wells.

The Read Buffalo Valley No. 2 in Section 2, has a twenty-plus and a fifteen-plus because the entire interval was not logged and there is no control to contour.

We used minimum values there. The well in Section 35 of Southwest Production Company is now owned by Clinton. They

drilled, I guess what you might call a replacement well, almost a twin to their first well, and it is an open hole completion, and it has no pay value assigned because there were no logs run through the pay there.

Two things of interest on Exhibit 5 are the fact that the Read Hondo State in Section 36, did record 136 mcf on drillstem tests of the Atoka pay interval, Atoka-Morrow pay interval and the one well which falls off the map, of the base map, the Read No. 1 Gulf, was drilled 1980 feet from the north and west lines of Section 5.

Now, that well did straddle pack the pay and did have gas to the surface in fifteen minutes, no gauge. It was a small amount of gas and constitutes a show of gas. Other wells, however, like the Read-Barnhill in Section 3 of 1527, did not record any noticeable show of gas and therefore definite at this time.

MR. STEVENS: At this time, Mr. Examiner, we would with your permission, we would like to ask Mr. LeMay to step down and ask Mr. K. Havenor to give us the details of the Ard Well located in the northwest quarter of Section 6. It is pivotal to our case and he has some information about the well and we would like to possibly recall Mr. LeMay after the completion of Mr. Havenor's testimony.

MR. UTZ: Certainly. You may do so.

K. HAVENOR,

called as a witness, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. STEVENS:

Q Would you state your name, address and your capacity in this hearing?

A K. Havenor, H-a-v-e-n-o-r, and I am a Consulting Geologist in Roswell, New Mexico.

Q Could you give us your educational and professional background, Mr. Havenor?

A I received a Bachelor of Science Degree from Colorado College in 1957 in Geology and a Masters Degree from the University of Arizona in 1958. I was employed by Pure Oil Company from 1958 to 1962 in the Permian Basin and I have been a consulting geologist in Roswell since 1962.

Q Have you testified before the Commission before?

A No, sir.

MR. STEVENS: Mr. Examiner, would you accept the qualifications of the witness?

MR. UTZ: Yes, sir.

Q (By Mr. Stevens) Mr. Havenor, could you state your familiarity with this field?

A Yes, sir. I have been a consultant to Mr. Read on

the drilling of all of the wells in Buffalo Valley and have been involved directly or indirectly in watching both of the southwest wells that were drilled and where I could I observed drilling operations on the Pan American wells.

Q Could you give us as completely, yet concisely, what you know about the Ard Well in the northwest quarter of Section 6?

A The Ard Well drilled into the Atoka open hole with air in very late December of 1968 and shortly thereafter, Mr. Read started drilling his well in Section 36. Their Hondo State Well which I was watching, Mr. Read's Hondo Well, I had the occasion to go past Ard Well on several occasions and they had attempted a completion and tried to acidize the formation and I found that the well was just shut in. There was no activity observed.

The pressures on the well and the gas flows from the well, and based on experience that I had had with other wells in Buffalo Valley, I thought it was possible to make a commercial completion of the Ard Well and I found out that Ard was preparing to send a casing crew out to plug the well. And I contacted Mr. Julian Ard in Midland and made a deal to take over the well and attempt a completion at my cost.

I worked with the well for about two weeks and came to the conclusion that there was a considerable amount of fluid remaining in the hole from acidizing operations.

Well, this is very critical in the Buffalo Atoka Sands. The sands are extremely susceptible to formation damage from fluid and in light of the experience we had had on the, not the first well, but the first recent well drilled in Buffalo Valley, Mr. Read's No. 1 Well in Section 2, we found here was a case where the well left alone without acid or fracked treatment, could be cleaned up by just general care, opening and shutting the valves and letting the well flow down. In other words, trying to pass the natural formation fluids, gas, through the reservoir to dehydrate the clays that had absorbed the water and we found on that well, when it was perforated, it had twenty-five pounds pressure on the wellhead, that it took nearly two weeks to get in the range of 700 pounds.

Subsequently -- that was shut in pressure. Subsequently flowing tubing pressures would be as high as fifteen and sixteen hundred pounds after the well was cleaned up.

I saw these same conditions existing in the Ard Well and therefore felt it would be advisable to attempt a completion. After I determined there was a considerable amount of fluid remaining from an acid job, which Ard had attempted, I got a swabbing unit and went out and attempted to swab the well.

The first swab run lifted a couple of hundred feet of fluid and gas came on extremely strong and I would have

estimated it at roughly a million cubic feet per day.

We dropped back in with the swab again and attempted a second run and the gas came on even stronger. And at that point, after a few minutes of high volume flow, probably in the range of a million and a half to possibly two million, at that point the well just shut off like the wellhead had been shut in. And then when the well was completed, they were attempting to avoid a problem that Mr. Read was having at that time on another well, by setting a very long slotted liner which was not cemented. It was hung and set in the open hole.

The slotted liner was for the purpose of keeping shale from above the pay from caving down and shutting off the sand because once this happened, we found on another well, that it was extremely expensive to cure the problem.

The liner was in excess of 230 feet long and it was slotted all the way. So I believe what happened was that either the casing collapsed or the shale caved in around the liner and did shut the well off. At that point, I returned the well to Ard for them to go ahead and plug because economic conditions did not justify any further attempts to complete it. But the point of it is that the well was responding, in my opinion, comparable to Charlie Read's No. 1 Well which is obviously a commercial well and I am of

the opinion that had this mechanical situation not occurred, that a commercial well could have been made in the Ard location.

Q How much water was in the hole just before the well shut off?

A We found fluid at 3000 foot, so this would have been a little over 5000 foot of fluid in the hole.

Q This million and a half or two million was coming up through the water?

A Yes.

Q The well was not cleaned up?

A We pulled several hundred feet of fluid with that first swab run.

Q Are you familiar with the Read No. 1 Gulf Well in Section 5?

A Yes. I was the well-site geologist. This well had an extremely thin sand section which we found on location after drilling and we straddle-tested and as a result, we got about 150,000 cubic feet per day which was not commercial.

Q Could you tell us about the Read Hondo State Well in Section 36?

A Almost exactly the same situation, a thicker sand section but the gas was very low volume.

Q Based on your knowledge of the Field and of the

three wells you particularly talked about, could you give us your opinion as to whether the west half of it, of Section 6, is underlain by gas and if you could, in your opinion, whether that gas would be commercial in the usual sense?

A I have already stated I think that a commercial well could have been made of the Ard Well. Yes, I do feel that the entire western half of Section 6 is underlain by gas and that it probably could be produced commercially.

Q Could you give us your estimate or again, your opinion of the area northeast of the Ard Well, of the remaining west half, based on your knowledge of these particular wells in the field?

A How much would be commercial?

Q If you could make such an estimate.

A Well, of course, we realize that as we move towards the north, northeast, the reservoir sand is thinning and I don't believe that the data in Buffalo Valley permits a delineation of X number of feet as commercial and not commercial. Probably, all of the west half of Section 6 would contain commercial sand.

MR. STEVENS: That is all the questions we have for this witness, Mr. Examiner.

MR. UTZ: Do you want to recall the man later or do you want him subject to cross examination now?

MR. STEVENS: I think it would be better if he were

subject to cross examination now, if such were wanted.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Havenor, was the Ard Well logged?

A Yes, sir. A gamma ray neutron was run across the pay section inside a drill pipe.

Q And did you state what that showed?

A It can only be used for correlation purposes. The fact that it was run through a gamma ray makes it almost impossible to determine such things as the net pay and any calculations would be impossible from the log, but it is good correlation to it. It did show sand.

Q How much sand did it show?

A About six feet.

Q That is what you based these contours on?

A Yes, sir. These are Mr. LeMay's contours; they are not mine.

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

MR. STEVENS: One more question I might ask.

Mr. Havenor, if one were to drill in the northwest quarter near the Ard Well, in your opinion, would there be any problem associated with the drilling because of the Ard Well?

A Well, I personally would be reluctant to drill in the vicinity of the Ard Well based on some knowledge of other

WILLIAM J. LeMAY,

was recalled as a witness, having been previously duly sworn,
was examined and testified as follows:

DIRECT EXAMINATION

BY MR. STEVENS:

Q Mr. LeMay, could you tell the Commission what you understand about the stratographic condition around the Ard Well on the east side of the Field, as particularly relates to the area northeast of the Ard Well in Section 6, west half of Section 6?

A Well, my interpretation of the area is, as Havenor testified, the six feet, it was assigned to that well on the basis of very limited information, a case called gamma ray neutron which is not definitive, but is throughout this field. We do not have good information. There is only one well that's been cored and that's the Pan Am dry hole, so we are dealing with a variety systems of logs, some open hole completions, some wells drilled with mud, where there is decent samples, some drilled with gas, where there is not.

Some of the recoveries from the holes drilled with mud, the full content of the sand is not recovered so it is very difficult to sample analysis to arrive at a good figure of net and gross thickness. However, I have made an attempt at this with these two maps, with all the information available.

This was brought out in the previous Buffalo Valley hearing where the final conclusion was that because of the lack of definitive information that there be an acreage factor for proration purposes and not for net feet of pay, et cetera. The information has increased slightly with more wells, but only slightly. And we are still left with an imperfect situation. I believe, however, by utilizing the information and with this interpretation shown on the isopach map, both Exhibits 4 and 5, that as control lines to the north-east part of the field, the Hondo State drilled by Read in Section 36, having a show of gas, the Read No. 1 Gulf, likewise off the map, but in Section 5, indicates very close proximity to commercial limits of the field.

The Ard Well in Section 6 has to be somewhat questionable, controversial, because of the fact that it -- there was no completed -- in other words, a completion attempt wasn't finalized. So, we don't know whether it would be commercial or not. All indications were that it was responding at that point like a commercial well, being very close to the response of Mr. Read's No. 1 Buffalo Valley. So, utilizing these factors in the critical end of the field, which is the north end of the field, I would assume that there is certainly gas underplays, or in place under the entire west half of Section 6 of the commercial limits which are very difficult to draw.

wells in similar situations. I recall one well that was reentered for the purpose of finding commercial gas in the Morrow. The well was sidetracked and the bottom of the hole was displaced approximately two hundred foot from the old bore hole and encountered treated sand. There was still high acid water content in the core from the sand.

We have no idea if where the acid treatment would have gone in the Ard Well and due to the fact that these sands are extremely susceptible to water damage, I would be reluctant to drill anywhere in the vicinity of the Ard Well. In fact, I wouldn't recommend that Mr. Read do it.

MR. STEVENS: No further questions.

MR. UTZ: These clays are bentonited clays?

THE WITNESS: Montmorillonite clays, yes, sir.

MR. UTZ: They tend to swell with moisture?

THE WITNESS: With water, yes, sir and the only way that we have found in the field to dehydrate them, is with the gas that is native to the formation. We have tried all kinds of commercial chemicals and fract treatments and acid treatments and a number of them have been responsive, but the natural method seems to be best.

MR. UTZ: Other questions of the witness? You may be excused.

If I was to pick one out of the air, I might pick that five foot contour line.

Q In your opinion then, will the granting of this application result in protection of correlative rights to the owners and royalty owners of the west half of Section 6?

A In my opinion, it would, yes.

Q Were these exhibits prepared by you or under your direction?

A They were prepared by me, yes.

MR. STEVENS: At this time, Mr. Examiner, we would like to offer in evidence Exhibits 1 through 5 of the applicant.

MR. UTZ: Without objection, Exhibits 1 through 5 will be entered into the record of this case.

(Whereupon, Applicant's Exhibits 1 through 5 were admitted into evidence.)

MR. STEVENS: No further questions.

MR. UTZ: Actually, then, Mr. LeMay in the acreage north of the Ard Well, in the west half of Section 6, you actually have little or no control?

THE WITNESS: That is correct. There is no well drilled in Section 31 which would help. The erratic nature of this sand is something else that it is difficult to predict. We do so with a few question marks.

I think the Morrow has proved erratic almost

everywhere with the exception of this Atoka-Penn Field we heard about this morning. They have equalized pressures and it is easier to deal with in that field than any other field with like contents.

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

If the proposed well here was productive, what are Mr. Read's plans as far as the east half of Section 6 is concerned?

THE WITNESS: He has a verbal commitment from Midwest and it's almost a refusal type thing, where Midwest does not commit by letter-agreement to farm it out to them, but if they did farm it out, he would certainly have first right of refusal on it.

So, it's not -- although, I couldn't call it Read control by any instance, they are negotiating with it now and there is a relationship there that might lead to another Read farmout.

So, Mr. Read, as you can see, controls quite a bit of the field either through acreage, purchase or agreement. And as far as the drainage factor, I think he would be draining himself and he's not really hurting anyone.

I think the State owns the majority of mineral interests surrounding the well. Also, it is uniform in that regard.

MR. UTZ: Other questions? He may be excused.

Statements in the case? Mr. Hatch?

MR. HATCH: The Commission has received letters offering no objections to the case from Franklin, Aston and Fair; Union Oil Company of California, Pan American Petroleum Corporation, Midwest Oil Corporation, Miles and Culligan and William B. Barnhill.

MR. UTZ: Other statements? The case will be taken under advisement.

I N D E X

WITNESS		PAGE
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K. HAVENOR		
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Cross Examination by Mr. Utz		14

EXHIBITSMARKEDENTERED INTO
EVIDENCE

Applicant's Exhibits
1 through 5

2

18

Laurinda M. Gonzales
Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4361, held by me on May 22, 1920.

[Signature] Examiner
New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2068 - SANTA FE
87501

**GOVERNOR
DAVID F. CARGO
CHAIRMAN**

**LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER**

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

June 10, 1970

Mr. Donald S. Stevens
McDermott, Connelly & Stevens
Attorneys at Law
Post Office Box 1904
Santa Fe, New Mexico

Re: Case No. 4361
Order No. R-3974
Applicant:
Read & Stevens

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

G. L. Carter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

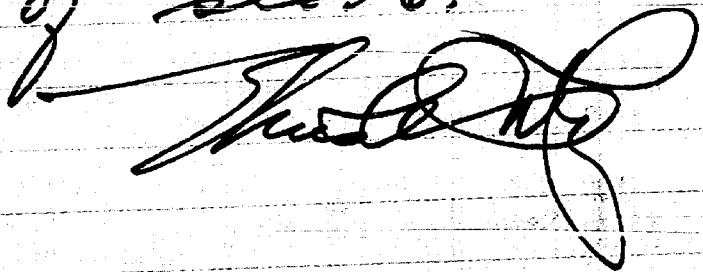
Artesia OCC x

Aztec OCC

Other				
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Case 4361
Heard 5-27-70
Rec. 5-28-70

Grant Read + Stenens are NSC
in Buffalo Valley - Penn
Now pool for a well located
980 SW 6-15-28. Dedicate
the 1/2 of sec. 6.



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. 4361
Order No. R-3974

APPLICATION OF READ & STEVENS, INC.,
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 May 27, 1970,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 10th day of June, 1970, 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, Read & Stevens, Inc., seeks authority
to drill a gas well at an unorthodox gas well location 990 feet
from the South line and 990 feet from the West line of Section 6,
Township 15 South, Range 28 East, NMPM, Buffalo Valley-Pennsyl-
vanian Gas Pool, Chaves County, New Mexico, to be dedicated to a
gas proration unit comprising the W/2 of said Section 6, in excep-
tion 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.

-2-

CASE No. 4361
Order No. R-3974

(4) That the proposed location, in the southwest quarter of said Section 6, is an off-pattern quarter section location.

(5) That the evidence indicates that a well drilled at the proposed non-standard location in the southwest quarter of said Section 6 should encounter a thicker and more prolific pay 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, Read & Stevens, Inc., is hereby authorized to drill a gas well at an unorthodox location 990 feet from the South line and 990 feet from the West line of Section 6, Township 15 South, Range 28 East, NMPM, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, to be dedicated to a gas proration unit comprising the W/2 of said Section 6.

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

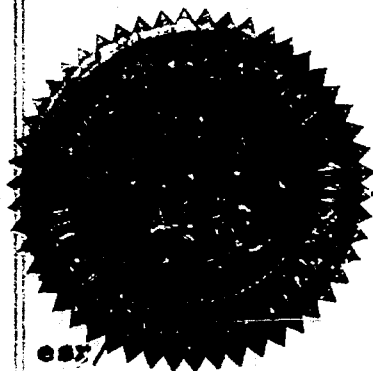
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

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



Docket No. 13-70

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 27, 1970

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 4357: Application of Stallworth Oil & Gas for an unorthodox oil well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill an infill producing oil well at an unorthodox location, 1315 feet from the South and East lines of Section 25, Township 16 South, Range 30 East, in its Square Lake Grayburg-San Andres Waterflood Project, Eddy County, New Mexico.
- CASE 4358: Application of Union Oil Company of California for a non-standard gas proration unit and unorthodox location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 240-acre non-standard gas proration unit comprising the NE/4 and E/2 SE/4 of Section 18, Township 8 South, Range 38 East, Bluit-San Andres Associated Pool, Roosevelt County, New Mexico, to be dedicated to its Federal 18 Well No. 2 at an unorthodox location 660 feet from the South and East lines of said Section 18. Applicant further requests that the allowable assigned to the subject well be effective as of May 1, 1970.
- CASE 4359: Application of Pan American Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a gas well at an unorthodox location 1650 feet from the South line and 990 feet from the West line of Section 22, Township 18 South, Range 26 East, Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico.
- CASE 4360: Application of Pan American Petroleum Corporation to directionally drill, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to locate its Byers "A" Well No. 30 at a point 663 feet from the North line and 1935 feet from the West line of Section 3, Township 19 South, Range 38 East, Hobbs, (Grayburg-San Andres) Pool, Lea County, New Mexico, and directionally drill said well to a bottom-hole location 330 feet from the North line and 1650 feet from the West line of said Section 3.
- CASE 4341: (Continued from the April 29, 1970, Examiner Hearing)
Application of Pan American Petroleum Corporation for two non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of two non-standard

(Case 4341 continued)

gas proration units for its State "C" Tract 13 Well No. 5, a dual completion, located 1980 feet from the North line and 660 feet from the West line of Section 36, Township 21 South, Range 37 East, Lea County, New Mexico, said units to be comprised as follows:

Blinebry Gas Pool - 240 acres - NW/4
and W/2 NE/4

Tubb Gas Pool - 200 acres - W/2 NW/4,
NE/4 NW/4 and W/2 NE/4

CASE 4361: Application of Read & Stevens for an unorthodox gas well location, Chaves County, New Mexico. Applicants, in the above-styled cause, seek authority to drill a gas well at an unorthodox location 990 feet from the South and West lines of Section 6, Township 15 South, Range 28 East, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, to be dedicated to a gas proration unit comprising the W/2 of said Section 6.

CASE 4362: Application of William J. LeMay for a non-standard gas proration unit or compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 318.9-acre non-standard gas proration unit comprising Lots 1 and 2 and the E/2 NW/4, and NE/4 of Section 7, Township 20 South, Range 25 East, Dagger Draw-Morrow Gas Pool, Eddy County, New Mexico, or a 478-acre non-standard unit comprising Lots 1, 2, 3, and 4, and the E/2 W/2, and NE/4 of said Section 7. In the alternative, applicant seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying said Section 7. The acreage in the above proposals is to be dedicated to a well 1650 feet from the North and West lines of said Section 7 which is to be re-entered.

CASE 4352: (Continued from the May 13, 1970, Examiner Hearing)
Application of Jack L. McClellan for the creation of a new gas pool or, in the alternative, the establishment of pool rules for two existing pools, Chaves and Lea Counties, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Queen gas pool comprising the following-described acreage:

CHAVES COUNTY, NEW MEXICO

Township 15 South, Range 29 East
Section 11: SE/4

Examiner Hearing - May 27, 1970

Docket No. 13-70

-3-

(Case 4352 continued)

CHAVES COUNTY, NEW MEXICO

Township 15 South, Range 29 East

Section 12: SW/4

Section 13: NW/4

Section 14: E/2

Section 23: NE/4 and SW/4

In the alternative applicant seeks the promulgation of special rules for the Sulimar-Queen Pool, Chaves County, and Double L-Queen Pool, Chaves and Lea Counties, New Mexico, as separate or as consolidated pools, including provisions for the classification of oil and gas wells, spacing and well location requirements for oil and gas wells, and an allocation formula for withdrawals by oil wells and gas wells.

314 SECURITY NATIONAL BANK BUILDING

CHARLES B. READ
PRESIDENT

NORMAN L. STEVENS, JR.
VICE-PRESIDENT

JOHN L. ANDERSON, JR.
EXPLORATION MANAGER

Read & Stevens, Inc.

Oil Producers

P. O. Box 2126

Roswell, New Mexico 88201

May 26, 1970

PHONE 622-3770

RECEIVED

70 MAY 27 PM 1 13

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

With reference to Case 4361 scheduled on Docket No. 13-70 scheduled for hearing May 27, 1970, enclosed please find original letters from leasehold owners represented in the proration unit offsetting the W/2 of Section 6-15S-28E, Chaves County, New Mexico. This half section represents the proration unit dedicated to a proposed well in the Buffalo Valley-Pennsylvanian Gas Pool which is the subject of our application for an unorthodox gas well location in the referenced case.

These letters all offer no objection to the applied for location and in most instances recommend approval of such location by the commission.

Yours very truly,

READ & STEVENS, INC.

John L. Anderson Jr.
John L. Anderson, Jr.

JLA: ng
Enc.

FRANKLIN, ASTON & FAIR, INC.
OIL PRODUCERS

P. O. BOX 1090
101 N. MISSOURI AVE.
ROSWELL, NEW MEXICO 88201

TELEPHONE:
AREA CODE 505 622-2040

R. R. ASTON
PRESIDENT

TOM P. STEPHENS
EXECUTIVE VICE PRESIDENT
TREASURER

LADORA LUCAS
VICE PRESIDENT

RICHARD L. RAY
VICE PRESIDENT

MARY ANN MORRISON
SECRETARY

April 23, 1970

Read & Stevens, Inc.
P. O. Box 2126
Roswell, New Mexico 88201

Attention: Mr. John L. Anderson, Jr.

Re: Request for Unorthodox Location
Buffalo Valley Pool
Chaves County, New Mexico

Gentlemen:

This letter is to evidence that Franklin, Aston & Fair, Inc. has no objection to the Atocha test well proposed by Read & Stevens, Inc. to be drilled at a location 990 feet from the South and West line of Section 6, Township 15 South, Range 28 East, Chaves County, New Mexico.

As an owner of a leasehold interest in a possible offsetting proration unit, we recommend that the request for an unorthodox location for the proposed well be approved by the Oil Conservation Commission.

Yours very truly,

FRANKLIN, ASTON & FAIR, INC.

By: Tom P. Stephens
Tom P. Stephens

TPS:da

cc: Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Union Oil and Gas Division: Central Region

Union Oil Company of California
500 North Mariefeld, Midland, Texas 79701
Telephone (915) 682-9731



Midland District

April 23, 1970

Read & Stevens, Inc.
P. O. Box 2126
Roswell, New Mexico 88201

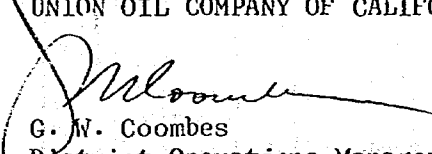
Gentlemen:

Request for Unorthodox Location
Buffalo Valley Pool
Chaves County, New Mexico

Union Oil Company of California hereby waives objection to your proposal to drill an 8600' Atoka test at a location 990' FS&WL of Section 6, 25-S, 28-E, Chaves County, New Mexico, on a proration unit covering the W/2 of said Section 6.

Very truly yours,

UNION OIL COMPANY OF CALIFORNIA


G. W. Coombes
District Operations Manager

AFT:rb

PAN AMERICAN PETROLEUM CORPORATION

OIL AND GAS BUILDING

P. O. BOX 1410

FORT WORTH, TEXAS—76101

D. L. RAY
DIVISION ENGINEER

April 24, 1970'

File: PEH-204-986.510.1

Re: Waiver for Read and Stevens, Inc.'s
Request for Unorthodox Location
Buffalo Valley Pool
Chaves County, New Mexico

New Mexico Oil Conservation Commission
Post Office Box 871
Santa Fe, New Mexico 87501

Gentlemen:

Pan American Petroleum Corporation, as an offset operator, has been advised of Read and Stevens, Inc.'s request to drill an unorthodox location in the Buffalo Valley Pool. It is our understanding this well is located 990' FSL and FWL of Section 6-158-28E Chaves County, New Mexico.

Please be advised Pan American Petroleum Corporation waives notice of hearing on the subject request.

Yours very truly,

D.L. Ray

CDB:jb



1500 Wilco Building

MIDLAND, TEXAS 79701

GENERAL OFFICES
1700 BROADWAY
DENVER, COLORADO 80202

May 5, 1970

DIVISION OFFICE
1200 CONTINENTAL NATIONAL
BANK BUILDING
FORT WORTH, TEXAS 76102

Read and Stevens, Inc.
P. O. Box 2126
Roswell, New Mexico 88201

Attention: Mr. John L. Anderson, Jr.

Re: L-15984 - State of New Mexico
CHAVES COUNTY, NEW MEXICO

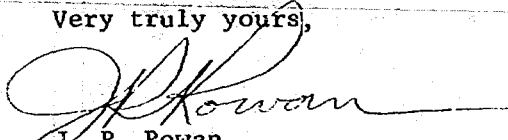
Gentlemen:

Midwest Oil Corporation has previously issued to you a Farmout Letter whereby you may earn an assignment of Midwest's leasehold covering the NW/4 and the E/2 SW/4 of Section 6-15S-28E.

You have now informed us that you would like to drill a well at a location 990 feet FS&WL of said Section 6 on a proration unit covering the W/2 of Section 6. You advise that this location constitutes an unorthodox location under the field rules for the Buffalo Valley Pool.

Midwest Oil Corporation has no objection to your test well being drilled at the aforementioned location and we would recommend that the Oil Conservation Commission grant your request for said unorthodox location.

Very truly yours,


J. R. Rowan
District Landman

JRR/rs

MINERALS & PETROLEUM
EXPLORATION, DEVELOPMENT,
EVALUATION

MYLES A. COLLIGAN

CONSULTING GEOLOGIST
SANTA FE, NEW MEXICO

P.O. BOX 1782
505-982-8995
ZIP CODE 87501

April 20, 1970

Read & Stevens, Inc.
P.O. Box 2126
Roswell, New Mexico 88201

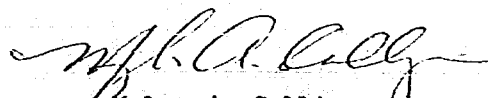
Attention: Mr. John L. Anderson

Dear John:

I do have a leasehold interest in the W/2SW/4 of Section
6, 15S - 28E Chaves County, New Mexico, and I have no objection
to your drilling an 8600' Atoka test at an unorthodox location
in the SW/4 of Section 6.

With best regards, I am

Very truly yours


Myles A. Colligan

P. O. BOX 1354
233 PETROLEUM BLDG.

TELEPHONES: AREA CODE 505
OFFICE 622-0540
RES. 622-0438

Wm. B. Barnhill
OIL & GAS PROPERTIES
ROSWELL, NEW MEXICO 88201

April 23, 1970

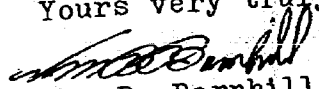
Read and Stevens, Inc.
Box 2126
Roswell, New Mexico 88201

Dear Sirs:

I am in receipt of your letter of April 16th in which you advised that you are requesting an O.C.C. hearing on May 18, 1970 for an unorthodox location in the Buffalo Valley Pool, Chaves County, New Mexico (Sec. 15 S, R 28 E).

This is to advise that I have no objection to your proposed hearing or the granting of said unorthodox location by the O.C.C.

Yours very truly,


Wm. B. Barnhill

cc

WBB:cb

FRANKLIN, ASTON & FAIR, INC.
OIL PRODUCERS

P. O. BOX 1090
101 N. MISSOURI AVE.
ROSWELL, NEW MEXICO 88201

TELEPHONE:
AREA CODE 505 622-2040

R. R. ASTON
PRESIDENT

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TREASURER

LADORA LUDAS
VICE PRESIDENT

RICHARD L. RAY
VICE PRESIDENT

MARY ANN MORRISON
SECRETARY

April 23, 1970

Read & Stevens, Inc.
P. O. Box 2126
Roswell, New Mexico 88201

Attention: Mr. John L. Anderson, Jr.

Re: Request for Unorthodox Location
Buffalo Valley Pool
Chaves County, New Mexico

Gentlemen:

This letter is to evidence that Franklin, Aston & Fair, Inc. has no objection to the Atocha test well proposed by Read & Stevens, Inc. to be drilled at a location 990 feet from the South and West line of Section 6, Township 15 South, Range 28 East, Chaves County, New Mexico.

As an owner of a leasehold interest in a possible offsetting proration unit, we recommend that the request for an unorthodox location for the proposed well be approved by the Oil Conservation Commission.

Yours very truly,

FRANKLIN, ASTON & FAIR, INC.

Original
Signed By

By: TOM P. STEPHENS
Tom P. Stephens

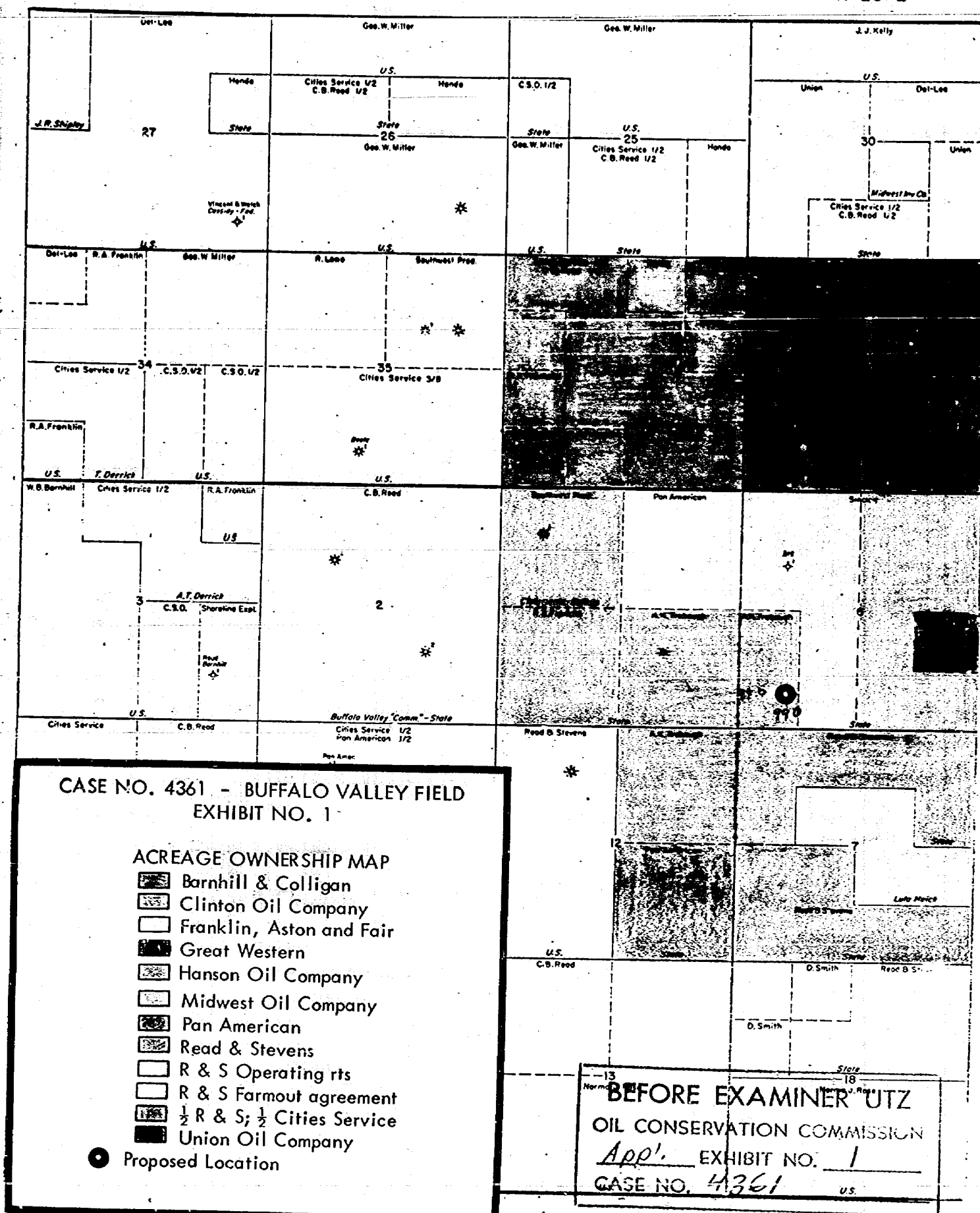
TPS:da

cc: Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

file - Case 4361

R-27-E

R-28-E

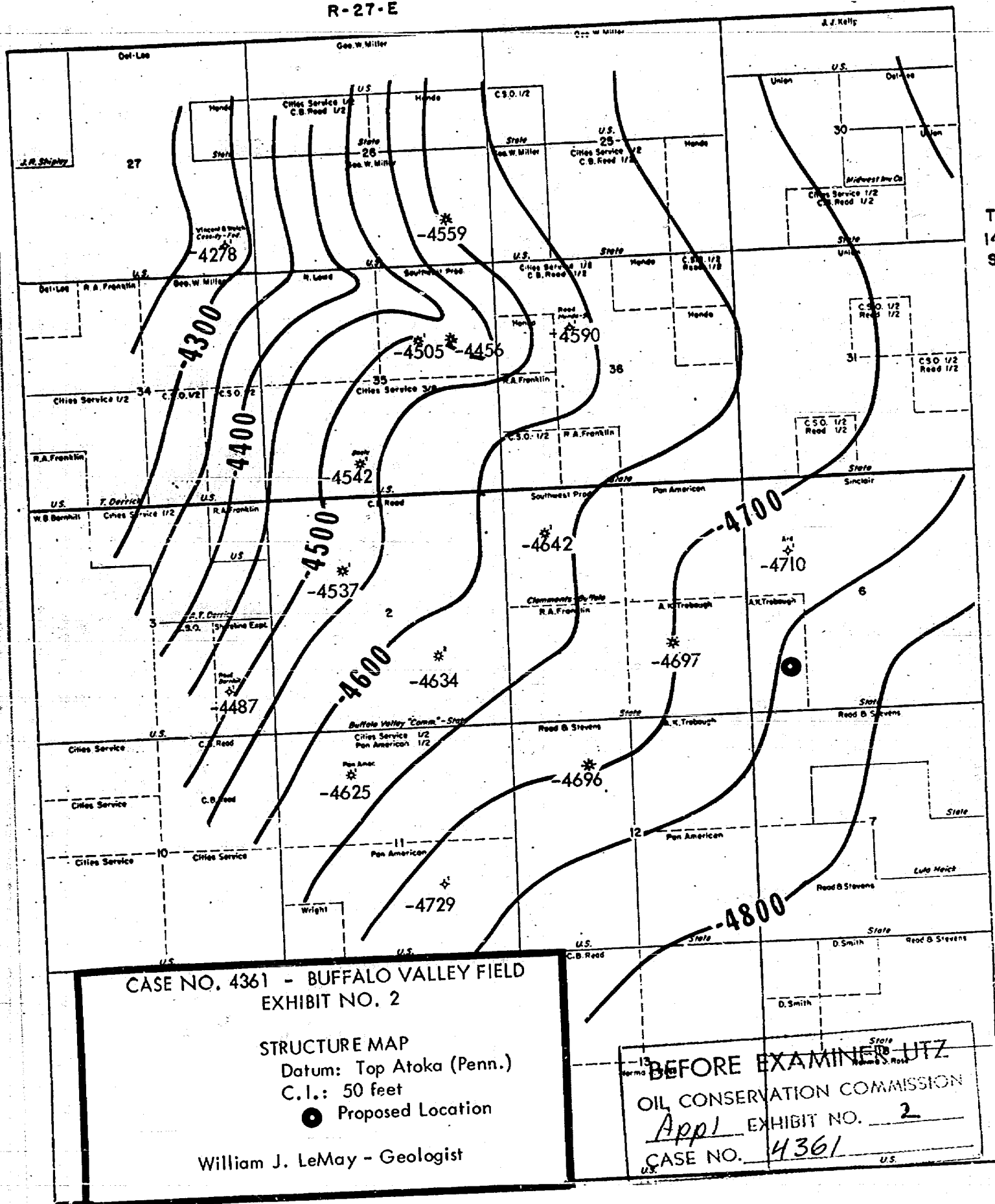
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R-27-E

R-28-E

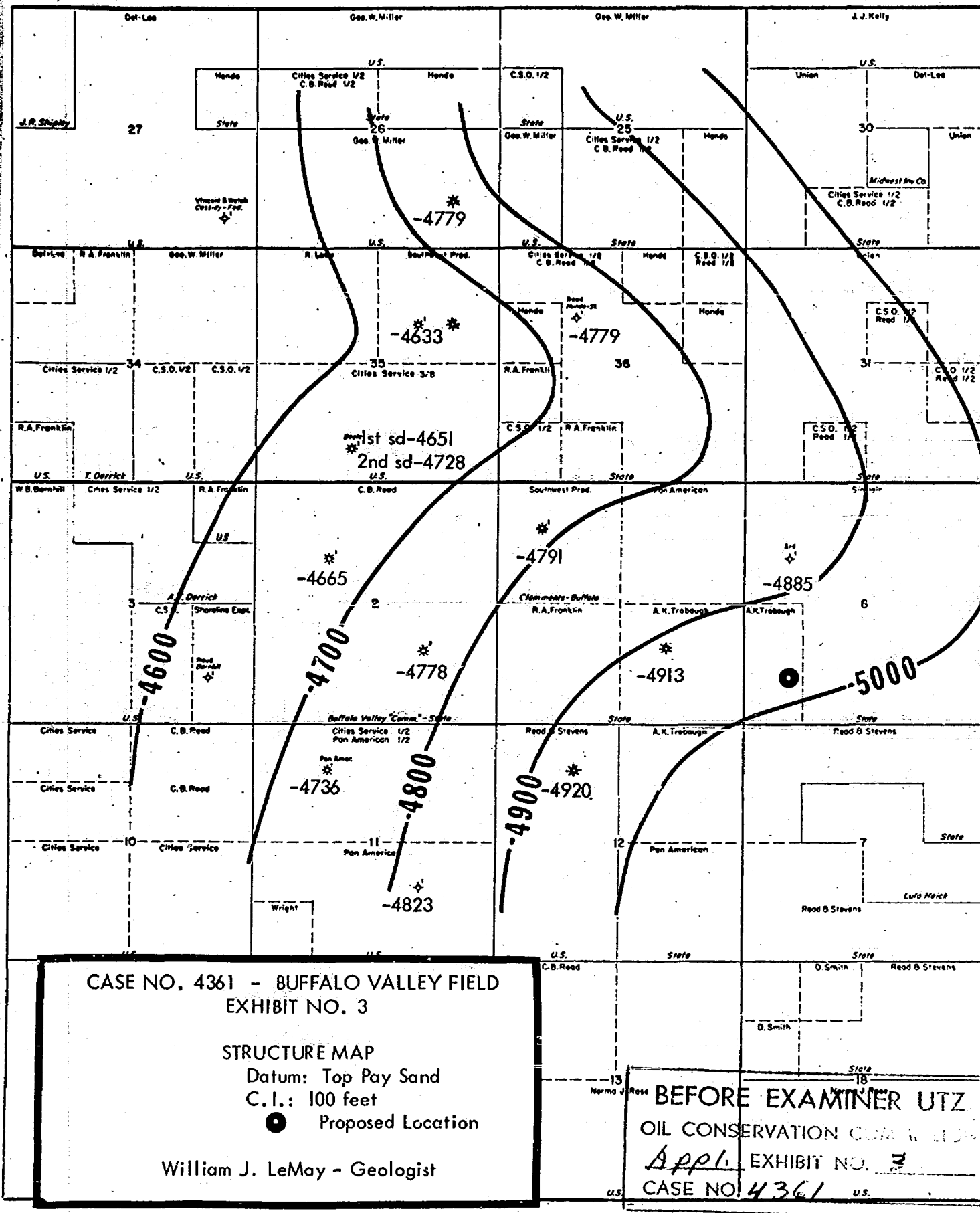
T 14 S

T 15 S



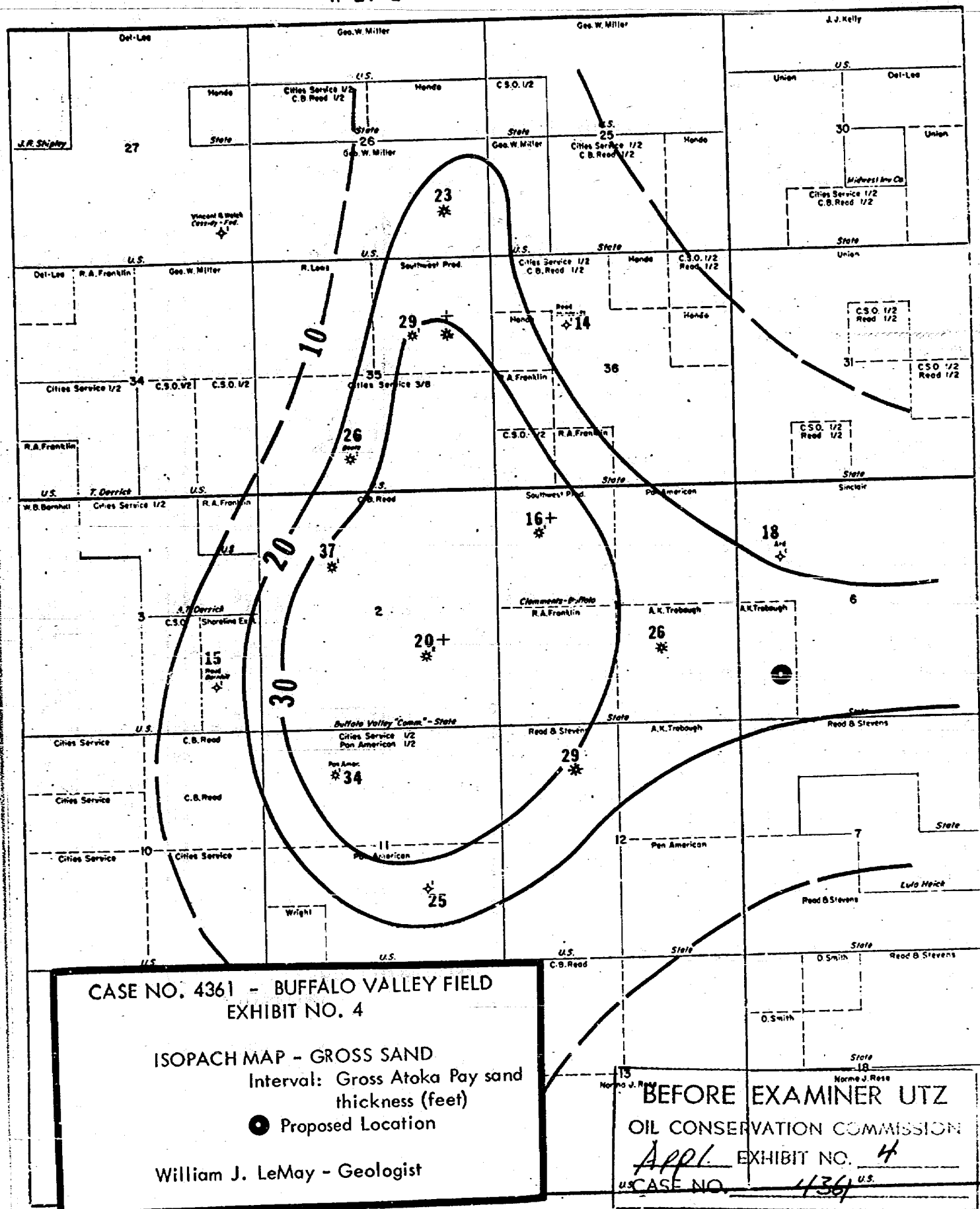
R-27-E

R-28-E



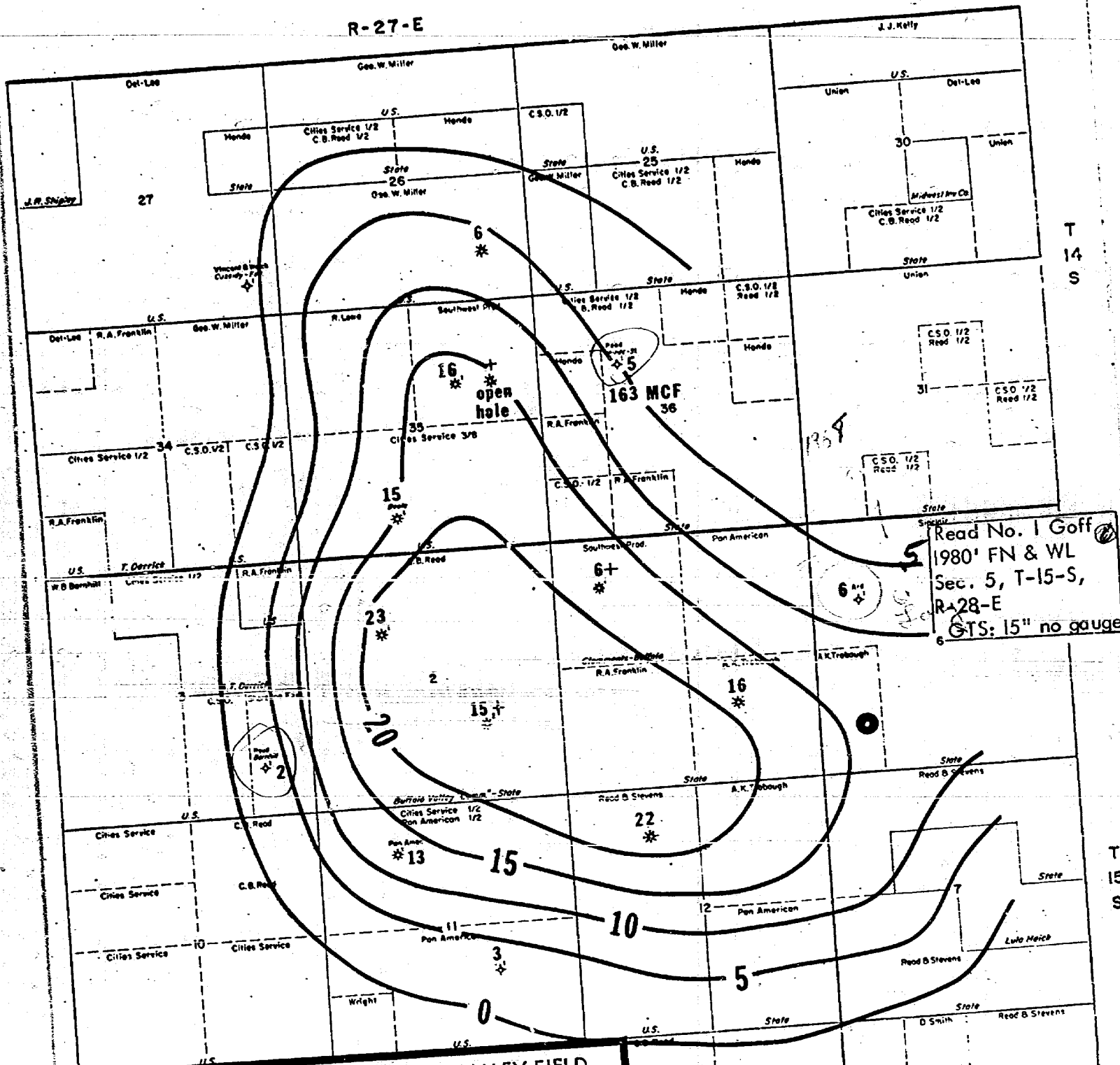
R-27-E

R-28-E



R-28-E

R-27-E



Read No. 1 Goff
1980' FN & WL
Sec. 5, T-15-S,
R-28-E
GTS: 15" no gauge

CASE NO. 4361 - BUFFALO VALLEY FIELD
EXHIBIT NO. 5

ISOPACH MAP - NET PAY
Interval: Net Pay sand
thickness (feet)
● Proposed Location

William J. LeMay - Geologist

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Appl. EXHIBIT NO. 5
CASE NO. 4361

BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

APPLICATION OF READ & STEVENS
FOR AN ORDER APPROVING AN
UNORTHODOX GAS WELL LOCATION,
BUFFALO VALLEY, PENNSYLVANIAN
FIELD, CHAVES COUNTY, NEW MEXICO

Case No. 4361

APPLICATION

Comes now Read & Stevens and applies to the Oil Conservation Commission of the State of New Mexico for the approval of an unorthodox gas well location to be located 990 feet from the South and West lines of Section 6, Township 15 South, Range 28 East Chaves County, New Mexico, as an exception to the provisions of Rule 2 of Order No. R-1670, as amended, and in support thereof would show the Commission:

1. Applicant is the owner of the right to drill for, develop and produce from the Pennsylvanian formation in the West 1/2 of Section 6, above Township and Range.
2. Unless applicant is granted approval of an unorthodox gas well location as proposed herein, he will be denied his right to obtain his just and equitable share of the gas underlying his lands.
3. Approval of the application will result in the recovery of gas that probably would not otherwise be recovered, will prevent waste, and correlative rights of the other owners in the area will be protected.

THEREFORE applicant requests that this matter be set for hearing before the Commission, or before the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving an unorthodox gas well location for Pennsylvanian production, as requested above.

DOCKET MAILED

Date 5-14-70

Respectfully submitted,

READ & STEVENS

By

Donald G. Stevens
McDermott, Connelly & Stevens
P. O. Box 1904
Santa Fe, New Mexico 87501

Attorneys for Applicant

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. 4361

Order No. R- 3974

APPLICATION OF READ & STEVENS, INC
FOR AN UNORTHODOX GAS WELL LOCA-
TION, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 27, 1970,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this day of June, 1970, 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, Read & Stevens, Inc., seeks authority to
drill a gas well Well No. at an unorthodox
gas well location 990 feet from the South line and 990 feet from
the West line of Section 6, Township 15 South, Range 28 East,
NMPM, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New
Mexico, to be dedicated to a gas proration unit comprising the
W/2 of said Section 6, 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 southwest quarter of said Section 6, is an off-pattern quarter section location.

(5) That the evidence indicates that a well drilled at the proposed non-standard location in the southwest quarter of said Section 6 should encounter a ~~more permeable~~ ^{thicker and more prolific pay} 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, Read & Stevens, ^{Inc.} is hereby authorized to drill its a gas well Well No. 1 at an unorthodox location 990 feet from the South line and 990 feet from the West line of Section 6, Township 15 South, Range 28 East, NMPM, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, to be dedicated to a gas proration unit comprising the W/2 of said Section 6.

-3-
CASE No. 4361

(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.