CASE 5544: CONTINENTAL OIL CO. FOR AN UNORTHODOX OIL WELL LOCATION, LEA COUNTY, NEW MEXICO

CASE NO.

5544

APPlication, Transcripts, Small Exhibits,

ETC.

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		4	EXAMI	NER HEARING	
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		6	IN THE MATTER OF:		
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		7	Application of Continer		CASE
M		8	for an unorthodox oil v Lea County, New Mexico		5544
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		10	BEFORE: Richard L. Stamets	. Examiner.	
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-		14	A P. P. B	ARANCES	
estalla .		15	For the New Mexico Oil	William F. Carr,	Esq.
			Conservation Commission:		
	3	16		State Land Offic Santa Fe, New Me	
100		17		Danea Te, New Tac	
I mak		1	For the Applicant:	Jason Kellahin,	Esq.
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New Mexico.

MR. KELLAHIN: If the Commission please, Jason
Kellahin, Kellahin and Fox, Santa Fe, appearing for the

applicant. I have one witness to be sworn.

Oil Company for an unorthodox oil well location, Lea County,

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(THEREUPON, the witness was duly sworn.)

MR. STAMETS: You may proceed, Mr. Kellahin.

MR. STAMETS: We will call the next case, 5544.

MR. CARR: Case 5544, application of Continental

VICTOR T. LYON

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Would you state your name, please?
- A. Victor T. Lyon.
- Q By whom are you employed and in what position,

Mr. Lyon?

- A. I'm employed by Continental Oil Company as Conservation Coordinator in the Hobbs Division Office, Hobbs, New Mexico.
 - Q You are a petroleum engineer?
 - A. Yes, I am.
 - Q Have you testified before the Oil Conservation

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Commission and made your qualifications a matter of record?

Yes, I have.

MR. KELLAHIN: Are his qualifications acceptable? MR. STAMETS: They are.

- (Mr. Kellahin continuing.) Are you familiar with the application of Continental Oil Company in Case 5544?
 - Yes, sir.
- Briefly what is proposed by the applicant in this case?
- A Case 5544 is the application of Continental Oil Company for approval of an unorthodox location for its Southeast Monument Unit Well Number 96 in the Cass-Pennsylvanian Pool, the well to be located sixteen hundred and fifty feet from the south line and nine hundred and ninety feet from the east line of Section 23, Township 20 South, Range 37 East, Lea County, New Mexico.
- I hand you what has been marked as Applicant's Exhibit Number One, and would you identify that exhibit, please?
- Exhibit Number One is a location plat showing the area of the proposed well. The heavy dashed line which surrounds an area covering the central and right-hand lower portion of the exhibit is the boundary of the Southeast Monument Unit. The proposed well, Number 96, is shown circled in red, the location sixteen hundred and fifty feet

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from the south line and nine hundred and ninety feet from the east line of Section 23. We have also shown the location ownership of leases and surrounding wells to the best of our knowledge and belief.

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The wells which have produced from the Cass-Penn

Pool are shown circled in black. All of the wells in this

pool have ceased to produce with the exception of well Number

96, which is shown in Unit J of Section 23.

MR. STAMETS: I believe that is 95.

A I'm sorry, You're right, Number 95. And it was completed February 24th of this year with an initial potential of two hundred and thirty-nine barrels of oil, two hundred and twenty-one barrels of water and on the most recent test taken March 3rd, it produced one hundred and ninety-six barrels of oil, two hundred and sixty-four barrels of water and thirty-four MCF of gas, and since its completion, through the month of June it has produced eleven thousand one hundred and eleven barrels of oil.

Q (Mr. Kellahin continuing.) You are referring to what has been marked Exhibit Number Two, will you identify that exhibit?

A. Exhibit Number Two is a structure map showing the structural configurations of the Pennsylvanian formations.

As you can see the structure is a northwest-southeast trending series of anticlines. The Pennsylvanian formation pinches out

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against the Central Basin platform to the east and evidences are extremely active water drop.

All of the wells that have been drilled to and completed in that Cass-Penn Pool have been abandoned with the exception of Number 95.

Because of the strong water drive from the west, we believe that possibly the oil-water contact is tilted because of the hydrodynamic affect of the water drive.

We interpret that there are considerable volumes of oil which can be recovered if locations can be chosen to penetrate the cap of oil that exists on top of a large volume of water.

- Q Is that the principal reason for your proposed location then?
 - A. Yes, it is.
- Q Now, referring to what has been marked Exhibit
 Number Three, will you identify that?
- Exhibit Number Three is a tabulation showing the cumulative oil which has been produced from the Cass-Penn Pool. It may be helpful to refer back to Exhibits One and/or Two as I discuss these, but the wells are the Amoco Guillie B Federal Number 12 in Unit J of Section 22, which has produced six thousand seven hundred and seventy-two barrels of oil, and Conoco Britt B-15 Number 9 in J of 15 which produced four thousand nine hundred and thirteen barrels, and the

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Phone (502) 982-921.

Southeast Monument Unit Number 2 in E of 23 has produced over seven hundred thousand barrels. Number 3 in K of 23 has produced over eight hundred thousand barrels. Number 4 in G of 23 has produced nearly six hundred thousand barrels.

Number 7 in F of 23 has produced over five hundred and fifty thousand barrels. Number 61 in P of 15 produced eighty-eight thousand barrels and Number 95 which is still producing in J of 23 has produced eleven thousand barrels as I testified, as of the end of June.

The second portion of the exhibit shows the latest test from the wells which have most recently produced from the pool and as you can see some of these tests are four and five years old. But you will notice that all of the wells indicate an extremely high water cut on the last test and Number 95 is producing better than fifty percent water cut, which, of course, we expect to increase.

- Q What is the standard location in this pool?
- A. The standard location is the center of a quarterquarter section. This pool has an eighty acre proration
 unit. The standard location is the center of a quarterquarter section with a tolerance of one hundred fifty feet -I believe it is two hundred feet -- in any direction for
 topographic reasons.
- Q. Referring to Exhibit Number Two, where would that place your well in connection with the structural position?

Well, if you look at the wells which were drilled,

dry or wet, in the pool, you will notice that they have been

drilled at forty-one fifty or below. Now, there may be

some exceptions to this in some of the locations, but they

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were on separate closures. For instance, Number 9 up in 5 Section 15 produced at a higher elevation than that, but it is a separate closure from the one that we have here. And a standard location would place that well very close to the 8 minus forty-one fifty contour. By moving to the proposed location we can come up structure some fifteen to twenty feet 10 which could be just the difference between recovering oil and 11 12 not recovering oil. Where is the nearest offset operator to your 13 14 proposed location?

Well, you can see that the nearest offset operator would be at least a mile away.

That would either be Amoco or Texaco?

Right. Amoco is a mile to the west and they own a twenty-five percent interest in the property.

Now, based on your experience in this pool, what estimate do you give for recovery for this well?

We have estimated a recovery for Well Number 96 as one hundred and eighty-one thousand barrels, and we also feel that if we are successful and if our interpretations are correct, there may be additional locations that we can

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drill which will be commercial and will recover still further oil.

- Q In your opinion, will granting of the application prevent waste?
 - A. Yes, it will.
- Q Will additional oil be recovered that would not otherwise be recovered?
 - A. Yes, it will.
- Q Are the correlative rights of any other operator impaired?
 - A I do not believe so.
- Q Were Exhibits One through Three prepared by you or under your supervision?
 - A Yes, they were.

MR. KELLAHIN: At this time I would like to enter into evidence Exhibits One, Two and Three.

MR. STAMETS: These exhibits will be admitted.

MR. KELLAHIN: That completes our testimony.

MR. STAMETS: Any questions of the witness? He may be excused.

Anything further in this case? We will take the case under advisement.

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County	of	Santa	Fe)	

I, SIDNEY F. MORRISH, a court reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Morrish, Court Reported

I do hereby certify that the foregoing is a complete record of the proceedings in

Wew Mexico Oil Conservation Commission

sid morrish reporting service

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. 5544 Order No. R-5087

APPLICATION OF CONTINENTAL OIL COMPANY FOR AN UNORTHODOX OIL WELL LOCATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 27, 1975, at Santa Pe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 9th day of September, 1975, 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, Continental Oil Company, seeks approval of an unorthodox oil well location 1650 feet from the South line and 990 feet from the East line of Section 23, Township 20 South, Range 37 East, NMPM, to test the Pennsylvanian formation, Cass-Pennsylvanian Pool, Lea County, New Mexico.
- (3) That the E/2 SE/4 of said Section 23 is to be dedicated to the well.
- (4) That a well at said unorthodox location will better enable applicant to produce the oil underlying the proration unit.
- (5) That no offset operator objected to the proposed unorthodox location.
- (6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the oil 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 will otherwise prevent waste and protect correlative rights.

-2-Case No. 5544 Order No. R-5087

IT IS THEREFORE ORDERED:

- (1) That an unorthodox oil well location for the Pennsylvanian formation is hereby approved for a well to be located at a point 1650 feet from the South line and 990 feet from the East line of Section 23, Township 20 South, Range 37 East, NMPM, Cass-Pennsylvanian Pool, Lea County, New Mexico.
- (2) That the E/2 SE/4 of said Section 23 shall be dedicated to the above-described well.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

PHILR. LUCERO, Chairman

EMERY ARNOLD, Member

JOE D. RAMEY, Member & Secretary

SEAL

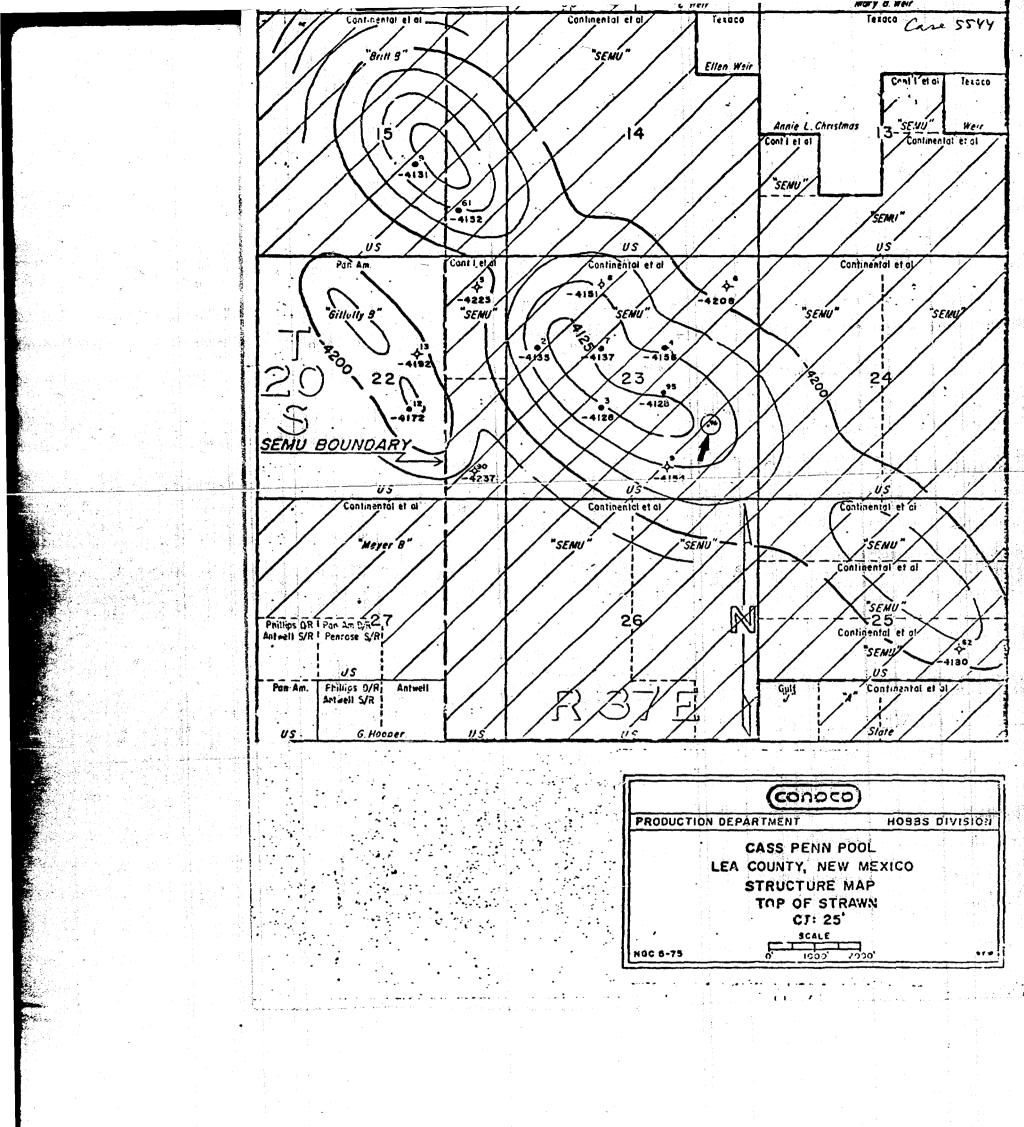
OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501

September 9, 1975

Re: CASE NO._

Jason Kellahin Kellahin & Fox	ORDER NO. R-5087
Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico	Applicant:
	Continental Oil Company
Dear Sir:	
	copies of the above-referenced entered in the subject case.
Yours very truly,	
Jos Allines	
JOE D. RAMEY	
Secretary-Director	
JDR/fd	
Copy of order also sent	
Hobbs OCC ▼	
Artesia OCC	
Aztec OCC	
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August 5, 1975

New Mexico Oil Conservation Commission (3) P. O. Box 2088 Santa Fe, New Mexico 87501

Attention Mr. J. D. Ramey, Secretary-Director

Gentlemen:

Application for Approval of Unorthodox Location - Southeast Monument Unit No. 96 - Cass Penn Pool, Lea County, New Mexico

Continental Oil Company on behalf of the Southeast Monument Unit is proposing to drill its unit Well No. 96 at a location 1650' FSL and 990' FEL of Section 23, T-20S, R-37E, Lea County, New Mexico. The special rules and regulations for the Cass Penn Pool contained in Order No. R-2825 require that a well be located within 150' of the center of a quarter-quarter section. Rule 5 provides for exceptions without notice and hearing upon notice to offset operators, provided no objection is received within twenty days. The proposed location is at least a mile from the nearest drillable location by another operator.

The attached structure map shows the proposed location and its structural position with relation to other wells. Operations in the Cass Penn Pool had been suspended because of high water production until Well No. 95 was drilled and completed in March of this year. No. 95 is producing at a substantial water-oil ratio and the proposed exception is needed in order to gain structural position to aid in the recovery of oil in this active water-drive area. Since no correlative rights are involved and a productive well will result in the recovery of additional oil and prevention of waste, it is respectfully requested that administrative approval of this application be granted and that the twenty-day waiting period be waived.

Yours very truly,

VIL:reh

CC:

U.S.G.S.

P. O. Box 1157

Hobbs, New Mexico 88240

Amoco Production Company

P. O. Box 367

Andrews, Texas 79714

JCC: FOH: JWK

Atlantic Richfield Company P. O. Box 1710 Hobbs, New Mexico 88240

Chevron Oil Company P. O. Box 1660 Midland, Texas 7970 August 5, 1975

THE CONSERVATION COMMA.

New Mexico Oil Conservation Commission (3) P. O. Box 2088 Santa Fe, New Mexico 87501

Attention Mr. J. D. Ramey, Secretary-Director

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Yours very truly,

VTL:reh

cc:

U.S.G.S.

P. O. Box 1157

Hobbs, New Mexico 88240

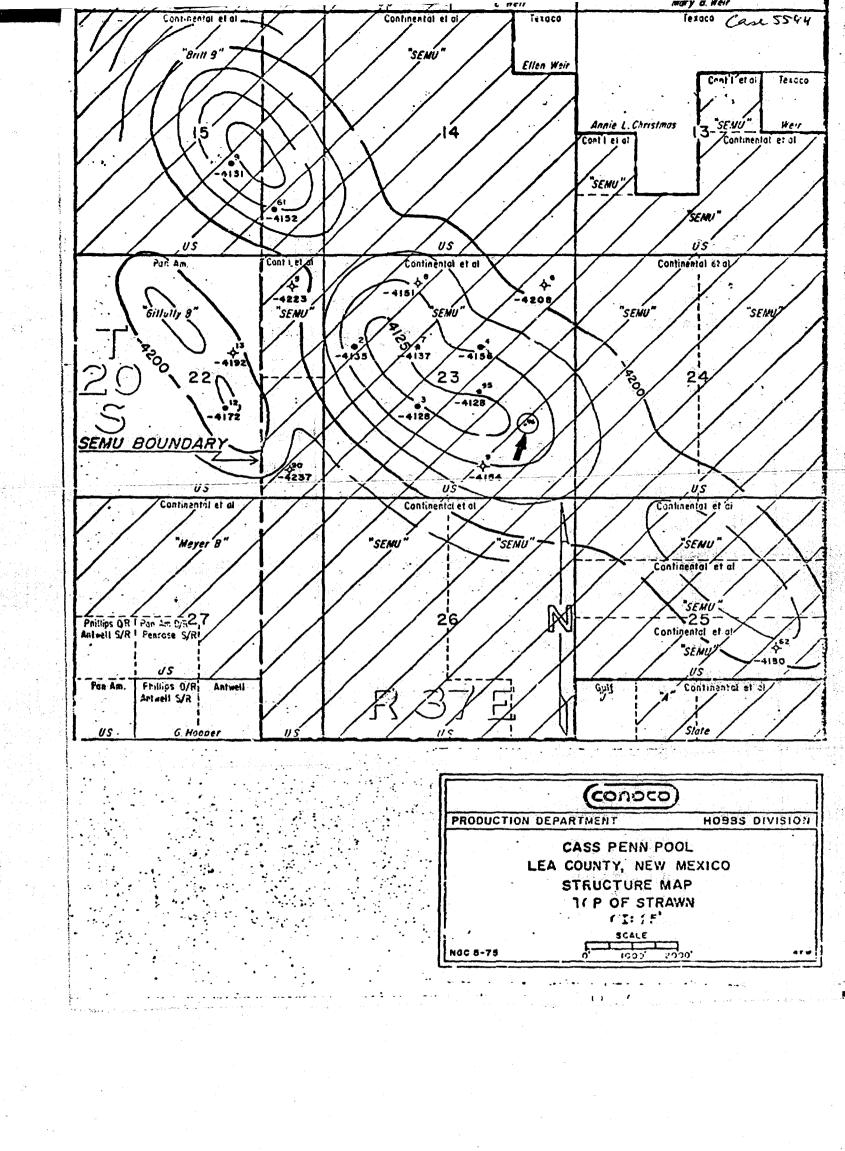
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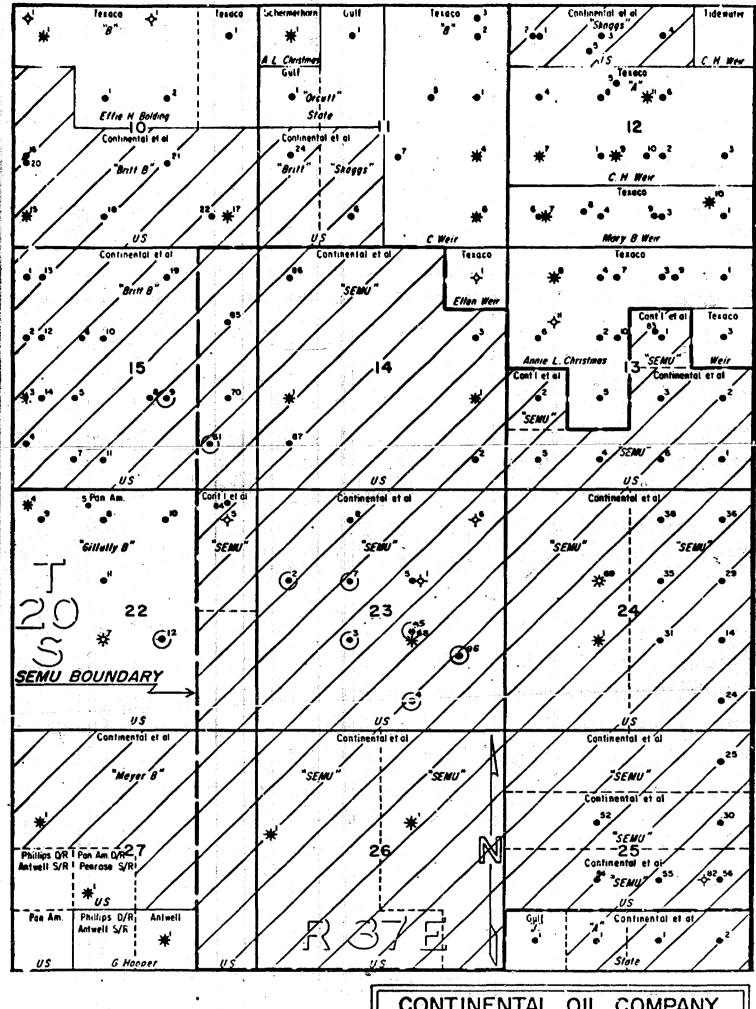
Amoco Production Company P. O. Box 367 Andrews, Texas 79714

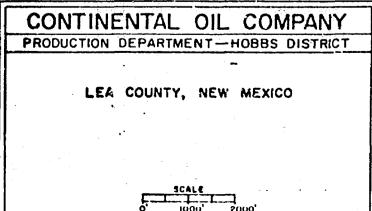
JCC: FOH: JWK

Atlantic Richfield Company P. O. Box 1710 Hobbs, New Mexico 88240

Chevron Oil Company
P. O. Box 1660
Midland, Texas 79701







Cumulative Recoveries as of 6-30-75

Amoco -	Gillully "B" Federal No. 12	J-22-20-37	6,772
Conoco -	Britt B-15 No. 9	J-15-20-37	4,913
Conoco -	SEMU No. 2	E-23-20-37	701,509
Conoco -	SEMU No. 3	K-23-20-37	804,045
Conoco -	SEMU No. 4	G-23-20-37	599,612
Conoco -	SEMU No. 7	F-23-20-37	551,833
Conoco -	SEMU No. 61	P-15-20-37	88,438
Conoco -	SEMU No. 95	J-23-20-37	11,111

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Latest Test Data

Date	Well No.	<u>011</u>	Water	Gas	Current Status
12-6-70	SEMU No. 2	24	4480	Ò	S.7.
10-8-72	SEMU No. 3	1	187	Ó	S.T.
4-17-71	SEMU No. 4	33	4722	Ó.	S.I.
6-23-71	SEMU, No. 7	12	4635	Ó	SWD
3-3-75	SEMU No. 95	196	264	34.	Prod.

CASE 5496: (Continued & Readvertised)

Application of Mesa Petroleum Co. for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox location to test the Pennsylvanian formation for its Nash Unit Well No. 2, to be located 1350 feet from the North line and 1300 feet from the West line, or in the alternative, 1350 feet from the North line and 1980 feet from the West line of Section 18, Township 23 South, Range 30 East, Eddy County, New Mexico.

CASE 5497: (Continued & Readvertised)

Application of Mesa Petroleum Co. for creation of two gas pools and special rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn gas pool and a new Morrow gas pool for its Nash Unit Well No. 1, located in Unit H of Section 13, Township 23 South, Range 29 East, Eddy County, New Mexico, and the promulgation of special pool rules therefor, including a provision for 640-acre spacing units.

CASE 5544:

Application of Continental Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Southeast Monument Unit Well No. 96 to be located 1650 feet from the South line and 990 feet from the East line of Section 23, Township 20 South, Range 37 East, Cass-Pennsylvanian Pool, Lea County, New Mexico.

CASE 5545: Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Drinkard and Penrose Skelly production in the wellbore of its Lockhart A-17 Well No. 3, located in Unit H of Section 17, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 5546: Application of Navajo Refining Company for compulsory pooling and an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the S/2 of Section 30, Township 17 South, Range 26 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at an unorthodox gas well location either 660 feet from the South and West lines, or 1980 feet from the South line and 660 feet from the West line of said Section 30. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of the applicant as the operator of the well and a charge for the risk involved in drilling said well.

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 5544
Order No. R- 5087
APPLICATION OF CONTINENTAL OIL COMPANY
FOR AN UNORTHODOX OLD WELL LOCATION, LEA COUNTY, NEW MEXICO.
ORDER OF THE COMMISSION
BY THE COMMISSION:
This cause came on for hearing at 9 a.m. on August 27 , 19 7 at Santa Fe, New Mexico, before Examiner Richard L. Stamets
NOW, on this <u>day of September</u> , 1975, 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, Continental Oil Company, seeks
approval of an unorthodox oil well location 1650 feet from the South
line and 990 feet from the EAST line of Section 23, Township
20 South , Range 37 East , NMPM, to test the
Pennsylvanian formation, Cass-Pennsylvanian Pool
Lea County, New Mexico.
(3) That the $\frac{\epsilon/2}{2}$ of said Section $\frac{23}{2}$ is to be dedicated to the
well.
(4) That a well at said unorthodox location will better enable
applicant to produce the Oil underlying the proration unit.
(5) That no offset operator objected to the proposed unorthodox
location.

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Case No.		
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(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the Oilin 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 will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That	an unor	thodox oil	vell loca	tion for the Pe	nnsylva	nian
formation is he	reby app	roved for a	well to	be located at a	point	1650
feet from the _	South	_line and _	990	feet from the	East	
line of Section	23	, Township	20	south , Ran	ge <u>37</u>	East
NMPM, Cass-Pe	nnsylva	nian		Pool,	Lea	County,
New Mexico.		.ce 1				

- (2) That the $\frac{\mathcal{E}/2}{\text{of said Section}}$ shall be dedicated to the above-described well.
- (3) 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.