CASE 5633: Appl. of SHELL OIL CO. for downhole commingling, Lea County

# CASE NO.

5633

APPlication,
Transcripts,
Small Exhibits,

ETC.



### **OIL CONSERVATION COMMISSION**

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

DIRECTOR JOE D. RAMEY

LAND COMMISSIONER PHIL R. LUCERO March 11, 1976



STATE GEOLOGIST EMERY C. ARNOLD

r. Summer Buell	ORDER NO. R-	73173
ontgomery, Federici, Andrews, Hannahs & Buell ttorneys at Law ost Office Box 2307 anta Fe, New Mexico 87501	Applicant:	Company
Dear Sir:		
Enclosed herewith are two co Commission order recently en		
Yours very truly,  JOE D. RAMEY  Director		
	£ :	
JDR/fd Copy of order also sent to:		
Hobbs OCC x Artesia OCC Aztec OCC		
Other		

Re: CASE NO.

5633

# 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. 5633 Order No. R-5175

APPLICATION OF SHELL OIL COMPANY FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 3, 1976, at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this 10th day of March, 1976, 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, Shell Oil Company, is the owner and operator of the J. P. Well No. 1, located in Unit C of Section 2, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That the applicant seeks authority to commingle Blinebry, Tubb-Drinkard and Devonian production within the wellbore of the above-described well.
- (4) That from the Blinebry zone, the subject well is capable of low marginal production only.
- (5) That from the Tubb-Drinkard zone, the subject well is capable of low marginal production only.
- (6) That from the Devonian zone, the subject well is capable of low marginal production only.
- (7) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

-2-Case No. 5633 Order No. R-5175

- (8) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.
- (9) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobbs district office of the Commission any time the subject well is shut-in for 7 consecutive days.
- (10) That in order to allocate the commingled production to each of the commingled zones in the subject well, 24 percent and 47 percent of the commingled oil and gas production, respectively, should be allocated to the Blinebry zone, 22 percent and 27 percent of the commingled oil and gas production, respectively, to the Tubb-Drinkard zone, and 54 percent and 26 percent of the commingled oil and gas production, respectively, should be allocated to the Devonian zone.

#### IT IS THEREFORE ORDERED:

- (1) That the applicant, Shell Cil Company, is hereby authorized to commingle Blinebry, Tubb-Drinkard and Devonian production within the wellbore of the J. P. Well No. 1, located in Unit C of Section 2, Township 25 South, Range 37 East, NMPM, Justis Field, Lea County, New Mexico.
- (2) That 24 percent and 47 percent of the commingled oil and gas production, respectively, shall be allocated to the Blinebry zone, 22 percent and 27 percent of the commingled oil and gas production, respectively, shall be allocated to the Tubb-Drinkard zone and 54 percent and 26 percent of the commingled oil and gas production, respectively, shall be allocated to the Devonian zone
- (3) That the operator of the subject well shall immediately notify the Commission's Hobbs district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to one Commission, a plan for remedial action.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-3-Case No. 5633 Order No. R-5175

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
PHIL R. LUCERO, Chairman

Enery C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

SEAL

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625 Calle Mejia, No. 122, Santa Fe. New Mexico 87501

Phone (\$05) 982-9212

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27555	BEFORE THE	
MEM	MEXICO OIL CONSERVATION	COMMISSION
	banta re, New Mexic	00
	March 3, 1976	

## EXAMINER HEARING

# IN THE MATTER OF:

Application of Shell Oil Company for downhole commingling, Lea County, New Mexico.

**CASE** 5633

BEFORE: Richard L. Stamets, Examiner

# TRANSCRIPT OF HEARING

# APPEARANCES

For the New Mexico Oil Conservation Commission:

William F. Carr, Esq. Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico

For the Applicant:

Sumner G. Buell, Esq.
MONTGOMERY, FEDERICI, ANDREWS,
HANNAHS & BUELL
Attorneys at Law
350 East Palace Avenue
Santa Fe, New Mexico

EXHIBIT INDEX

EXHIBIT INDEX

Applicant's Exhibit One-A, Structure Map
Applicant's Exhibit One-C, Structure Map
Applicant's Exhibit Two-A, Configuration of Wells
Applicant's Exhibit Two-B, Proposed Completion
Applicant's Exhibit Three-A, Graph
Applicant's Exhibit Three-B, Graph
Applicant's Exhibit Three-C, Graph

Applicant's Exhibit Four, Tabulation

Applicant's Exhibit Five, Letters

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MR. STAMETS: We will call Case 5633.

MR. CARR: Case 5633, application of Shell Oil

Company for downhole commingling, Lea County, New Mexico.

MR. BUELL: Mr. Examiner, I'm Sumner Buell with Montgomery, Federici, Andrews, Hannahs and Buell in Santa Fe appearing on behalf of the applicant and we have one witness

MR. STAMETS: Are there any other appearances? The to be sworn. witness will stand and be sworn, please.

(THEREUPON, the witness was duly sworn.) MR. STAMETS: You may proceed, Mr. Buell.

# R. W. KRETZLER

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

# DIRECT EXAMINATION

BY MR. BUELL:

- Would you state your name, please? Q.
- R. W. Kretzler. Ą,
  - Mr. Kretzler, where do you reside? Q.
  - In Midland, Texas.
- And by whom are you employed and in what capacity? A.
  - I'm employed by Shell Oil Company as a Senior Q. A.

Operating Engineer.

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MR. STAMETS: They are.

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Q (Mr. Buell continuing.) What is sought in this application, Mr. Kretzler?

15 16 A. Shell is seeking permission to downhole commingle the Blinebry, Drinkard and Devonian that are three producing zones in the Shell State J. P. No. 1 located in the North Justis Field, Lea County.

Have you previously testified before the New Mexico

Oil Conservation Commission or one of its examiners and had

your qualifications accepted as a matter of record?

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Q Referring you to what has been marked as Exhibits One-A, One-B and One-C would you describe for the Examiner what the exhibits show?

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A. These are structure maps. Exhibit One-A is contoured on the Blinebry. It shows the well in question outlined with a red circle. The well is located in the northeast of the northwest quarter of Section 2, Township 25 South, Range 37 East.

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Exhibit One-B is a similar plat contoured on top of

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the Drinkard and One-C is the Devonian structure.

The black dots on all three maps are the current wells that produce as shown on the latest proration schedule.

- Now, referring you to Exhibit Two-A, would you
  describe what that shows, please?
- A. Exhibit Two-A is the current configuration of the wells. It is a semi-tubingless completion in that there are two strings of two-and-seven-eighths inch casing cemented in the well and an additional string of four-and-a-half inch casing. The well was drilled in 1962 and it now produces with a scab liner over some perforations that are in communication with the Blinebry zone. The Devonian string has a casing patch in the Blinebry perforated interval and it produces through tubing under an inflatable Lynnes packer.
- 0. What are the present producing characteristics of this well at the present time?
- A. The well is currently, it is in communication, we have had problems with the separation tools holding. It is nearing the end of its flowing life and it needs to be placed on artificial lift.
- Q. Referring you to Exhibit Two-B, would you discuss that?
- A. Exhibit Two-B is our proposed completion, assuming that the Commission will permit us to downhole commingle the well, in that we are proposing to place the well on a single

lift, do additional perforating in the large casing string, whereas we would have better communication between the three zones, we would use the annulus of the four-and-a-half inch casing and the two tubingless completions as gas vents for the pumping installation.

Q Okay. Why does Shell feel it will be beneficial to commingle this particular well?

A. Well, first it is a matter of economics, I suppose, and secondly we calculate that we will recover an additional six thousand barrels of oil by producing the well with a single economic limit. If we have to squeeze the well and place all three zones on artificial lift we are talking about an expenditure of somewhere around a hundred and sixteen thousand dollars. If we are permitted to produce the well with a single lift, commingled downhole, we are talking about an expenditure of some forty-three thousand dollars and we envision some seventy three thousand dollar saving by commingling.

Q Have you arrived at a formula for allocating production in the various zones?

A. Yes, we have calculated the remaining reserves, both oil and gas for the three zones and our proposed formula would be twenty-four percent of the oil production assigned to the Blinebry, thirty-seven percent of the gas from the Drinkard zone, twenty-two percent of the oil and twenty-seven percent of the gas and for the Devonian, fifty-four percent of the oil

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and twenty-six percent of the gas.

- Q. Now, how did you arrive at that allocation?
- A. These reserves were calculated on the basis of an exponential decline of the producing characteristics of the production of the well.
- Q Referring you to Exhibits Three A, B and C, are these the graphs showing the decline?
- A. Yes, these are the production histories since '69 on, showing the declined production and the projected reserves, along with the calculations shown on Exhibits Three-A, B and C for the three zones.
- Q. Those calculations are in the lower righthand corner of that exhibit?
  - A. That is correct.
  - Q Referring you to Exhibit Four, what does that show?
- A. Exhibit Four is merely a tabulation of the reported production data that has been shown on these production plots.
- Q. Do you feel there will be any cross flow or communication between the three zones due to this commingling?
- A. I really don't believe so because we intend to keep the well pumped off.
- A How about the bottom-hole pressures in these wells are they fairly close, or in these zones?
- A. Well, it is pretty hard to take bottom-hole pressures when the well is in communication but a test taken last week,

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we have a bottom-hole pressure in the Devonian zone of some eight hundred and forty-three pounds, which does not appear to be in communication with the shallower zone at this time. The bottom-hole pressure of the two shallower zones are the Blinebry six hundred pounds and the Drinkard six hundred and fifty pounds. Now, these pressures were taken at different datum and when you relate them to a common datum, say at the Blinebry interval, they relate very closely to the same pressure.

- Q How about the ownership in this well, is it common both royalty and working interest owner throughout the three zones?
  - A. Yes, it is, Shell owns one hundred percent.
- Q Do you know if there are any additional wells in the area that are commingled?
- A. We understand that the Commission has granted permission to other operators. Texaco to the north has been granted permission for these three zones, plus additional zones in similar tubingless completions.
- Q And referring you to Exhibit Number Five, would you identify that?
- A. Exhibit Five is our letter to the Land Office Commissioner, requesting that we are permitted to downhole commingle and his answer.
  - Q. And it was?
  - A. Affirmative.

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2	Affirmative. Is it your opinion that the grand of this application would prevent waste and protect correlative
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5	the recovery from the well.  the recovery from the well.  Exhibits One through Four and the sub-parts
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	A. They were.  MR. BUELL: I move Exhibits One through  MR. STAMETS: These exhibits One through
.03	MR. STAMETS: The Exhibits One this
<b>9</b>	10    APP
service	MR. BUELD.  These exhibits WIII  MR. STAMETS: These exhibits One through  (THEREUPON, Applicant's Exhibits One through
service ervice 8' ew Mexico 8'	(THEREUPON, Applicance)  11  Five were admitted into evidence.)  Thave nothing else, Mr. Examiner.
1116 1118 Series	11 (THEREUPON)  Five were admitted into evidence.
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<b>Feb</b> (505)	13 N
Sh Cour	13 CROSS EXAMINATION
sid morrisl General General Co. Calle Mejia, No.	15  16  BY MR. STAMETS:  Q. Mr. Kretzler, you will be installing a pumping unit
Meji i	15   installing a pump
sid Sale	16 BY MR. STAMETS: 16 BY MR. STAMETS: 16 BY MR. STAMETS: 17 YOU will be installing and stalling
\$23	Mr. Kretzler, You
	17   Q.
<b>1.1</b>	in this well?  18 In this well?  A. Yes, sir.  19 Do you anticipate that the production will be such  O. Do you anticipate that the production will be such  On this well?
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المساورة	A. Yes, sir.  19  Q. Do you anticipate that the product 20  20  that you will be essentially unrestricted as far as an 21 concerned?
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day	and	the	ratio	is	some	where	around	eigh	it	thousa	and.		

- Q. Do you anticipate any significant increase in the production?
- A. Well, I suppose we might pick up ten barrels of oil or so a day initially by placing it on the pump.
- Q Now, you've got, oh, maybe a two hundred pound differential there, do you think that is enough to cause any problem with oil migrating from one zone to the other in this well?
- A. Not as long as we pump it off, we are looking at essentially the bottom-hole pressure at any given level, so we wouldn't expect any large amount of migration.
  - Q Did you indicate that the fluids are compatible?
  - A. Yes, they are, the oil is sweet.

MR. STAMETS: Are there any questions of the witness?
He may be excused.

(THEREUPON, the witness was excused.)

MR. STAMETS: Anything further in this case?

MR. BUELL: No.

MR. STAMETS: We will take the case under advise-

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#### REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand 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.

I do hereby certify that the foregoing is a complete record of the proceedings in Mexico Cil Conservation Commission

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	BEFORE THE
NEW	MEXICO OIL CONSERVATION COMMISSION
	Santa Fe, New Mexico March 3, 1976
	EXAMINER HEARING

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Attorneys at Law
350 East Palace Avenue
Santa Fe, New Mexico

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R. W. KRETZLER

Direct Examination by Mr. Buell

Cross Examination by Mr. Stamets

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#### DIRECT EXAMINATION

BY MR. BUELL:

- Would you state your name, please?
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  - Mr. Kretzler, where do you reside?
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- Have you previously testified before the New Mexico Oil Conservation Commission or one of its examiners and had your qualifications accepted as a matter of record?
  - Yes, I have.
- Are you familiar with what is sought in the applica-Q. tion in Case 5633?
  - A. I am.

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

MR. STAMETS: They are.

- (Mr. Buell continuing.) What is sought in this application, Mr. Kretzler?
- Shell is seeking permission to downhole commingle the Blinebry, Drinkard and Devonian that are three producing zones in the Shell State J. P. No. 1 located in the North Justis Field, Lea County.
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S Calle Mejra, No. 122, Santa Fe, New Mexico 87501

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- Q Okay. Why does Shell feel it will be beneficial to commingle this particular well?
- A. Well, first it is a matter of economics, I suppose, and secondly we calculate that we will recover an additional six thousand barrels of oil by producing the well with a single economic limit. If we have to squeeze the well and place all three zones on artificial lift we are talking about an expenditure of somewhere around a hundred and sixteen thousand dollars of the well with a single lift, commingled downhole, we are talking about an expenditure of some forty-three thousand dollars and we envision some seventy-three thousand dollars and we envision some seventy-three thousand dollars are commingling.
- Q Have you arrived at a formula for allocating production in the various zones?
- A. Yes, we have calculated the remaining reserves, both oil and gas for the three zones and our proposed formula would be twenty-four percent of the oil production assigned to the Blinebry, thirty-seven percent of the gas from the Drinkard zone, twenty-two percent of the oil and twenty-seven percent of the gas and for the Devonian, fifty-four percent of the oil

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- Referring you to Exhibits Three A, B and C, are these
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- A. Yes, these are the production histories since '69 on, showing the declined production and the projected reserves, along with the calculations shown on Exhibits Three-A, B and C for the three zones.
- Q Those calculations are in the lower righthand corner of that exhibit?
  - A. That is correct.
  - Q Referring you to Exhibit Four, what does that show?
- A Exhibit Four is merely a tabulation of the reported production data that has been shown on these production plots.
- Q. Do you feel there will be any cross flow or communication between the three zones due to this commingling?
- A. I really don't believe so because we intend to keep the well pumped off.
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we have a bottom-hole pressure in the Devonian zone of some eight hundred and forty-three pounds, which does not appear to be in communication with the shallower zone at this time. The bottom-hole pressure of the two shallower zones are the Blinebry six hundred pounds and the Drinkard six hundred and fifty pounds. Now, these pressures were taken at different datum and when you relate them to a common datum, say at the Blinebry interval, they relate very closely to the same pressure

- Q How about the ownership in this well, is it common both royalty and working interest owner throughout the three zones?
  - A Yes, it is, Shell owns one hundred percent.
- Q. Do you know if there are any additional wells in the area that are commingled?
- A. We understand that the Commission has granted permission to other operators. Texaco to the north has been granted permission for these three zones, plus additional zones in similar tubingless completions.
- And referring you to Exhibit Number Five, would you identify that?
- A Exhibit Five is our letter to the Land Office Commissioner, requesting that we are permitted to downhole commingle and his answer.
  - Q And it was?
  - A. Affirmative.

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-	Q	Affirmativ	e. Is	it you	opinic	on that	the	granting
of	this	application	would	prevent	waste a	ind pro	tect	correlative
rig	hts?							

- A. I believe it would. In fact, it ought to increase the recovery from the well.
- Q Were Exhibits One through Four and the sub-parts prepared by you or under your supervision?
  - A. They were.

MR. BUELL: I move Exhibits One through Five.

MR. STAMETS: These exhibits will be admitted.

(THEREUPON, Applicant's Exhibits One through

Five were admitted into evidence.)

MR. BUELL: I have nothing else, Mr. Examiner.

#### CROSS EXAMINATION

#### BY MR. STAMETS:

- Q Mr. Kretzler, you will be installing a pumping unit in this well?
  - A Yes, sir.
- Q Do you anticipate that the production will be such that you will be essentially unrestricted as far as an allowable is concerned?
  - A I don't understand your question.
- Q. What total volume of production do you expect from the commingled well?

ment.

A. The well makes about twenty-two barrels of oil a
day and the ratio is somewhere around eight thousand.
Q Do you anticipate any significant increase in the
production?
A. Well, I suppose we might pick up ten barrels of oil
or so a day initially by placing it on the pump.
Q Now, you've got, oh, maybe a two hundred pound
differential there, do you think that is enough to cause any
problem with oil migrating from one zone to the other in this
well?
A. Not as long as we pump it off, we are looking at
essentially the bottom-hole pressure at any given level, so
we wouldn't expect any large amount of migration.
Q Did you indicate that the fluids are compatible?
A. Yes, they are, the oil is sweet.
MR. STAMETS: Are there any questions of the witness?
He may be excused.
(THEREUPON, the witness was excused.)
MR. STAMETS: Anything further in this case?
MR. BUELL: No.

MR. STAMETS: We will take the case under advise-

sid morrish reporting service

General Court Reporting Service

825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501

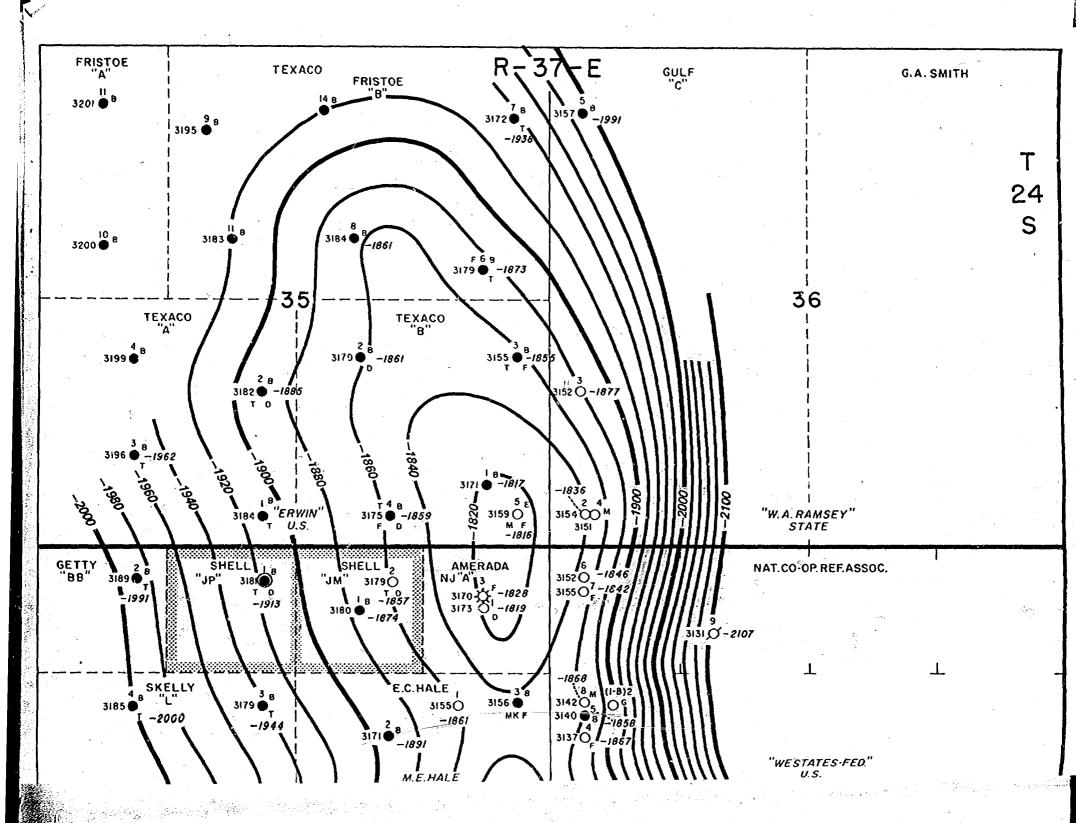
Phone (505) 982-9212

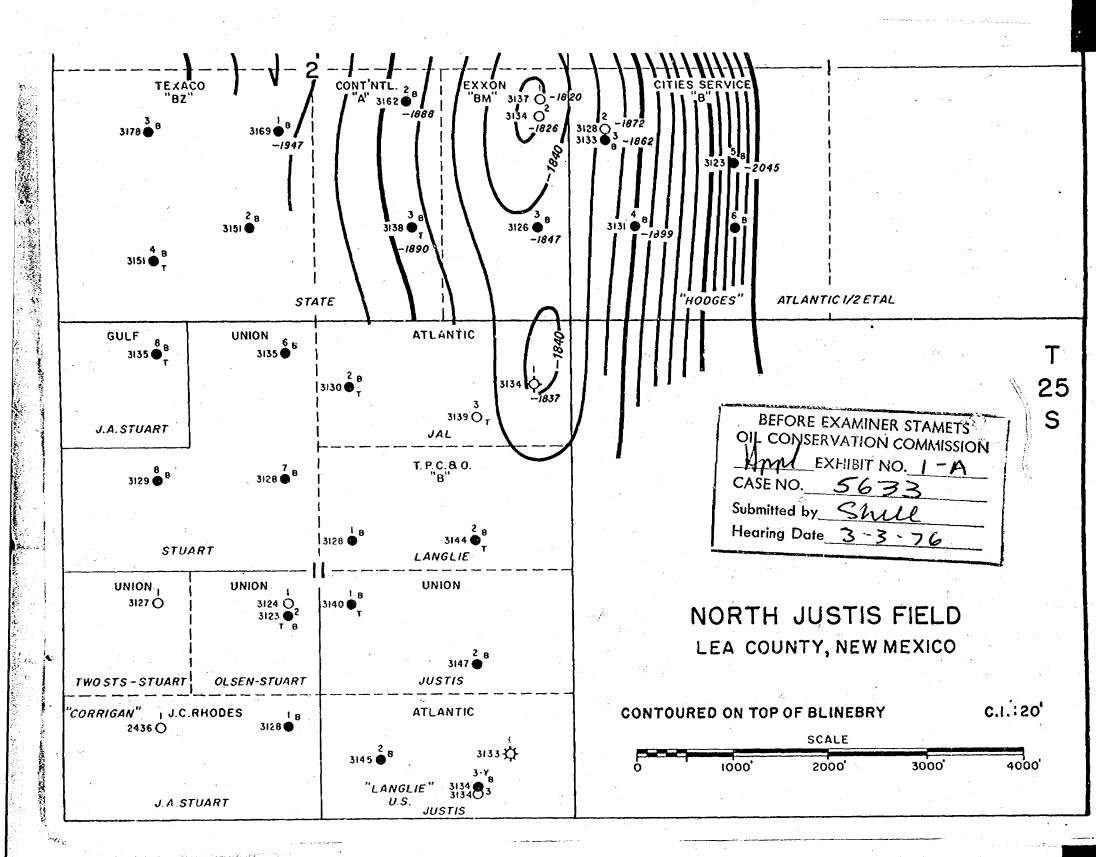
# REPORTER'S CERTIFICATE

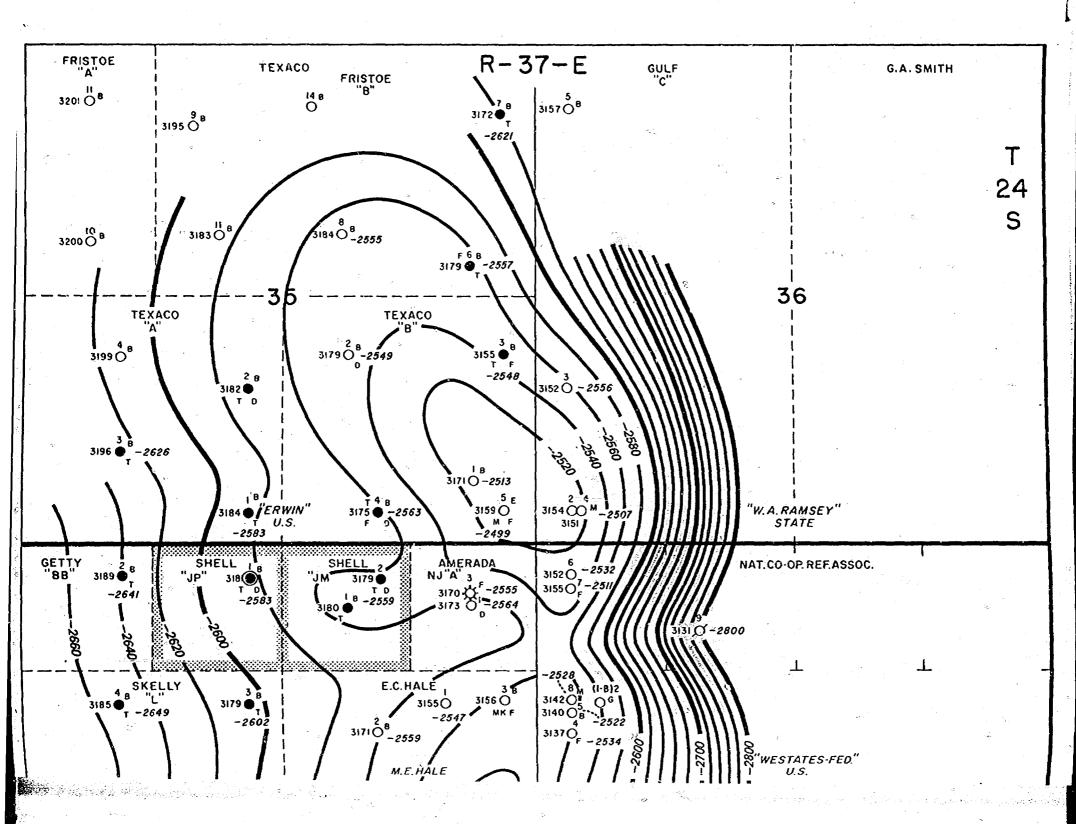
I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and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

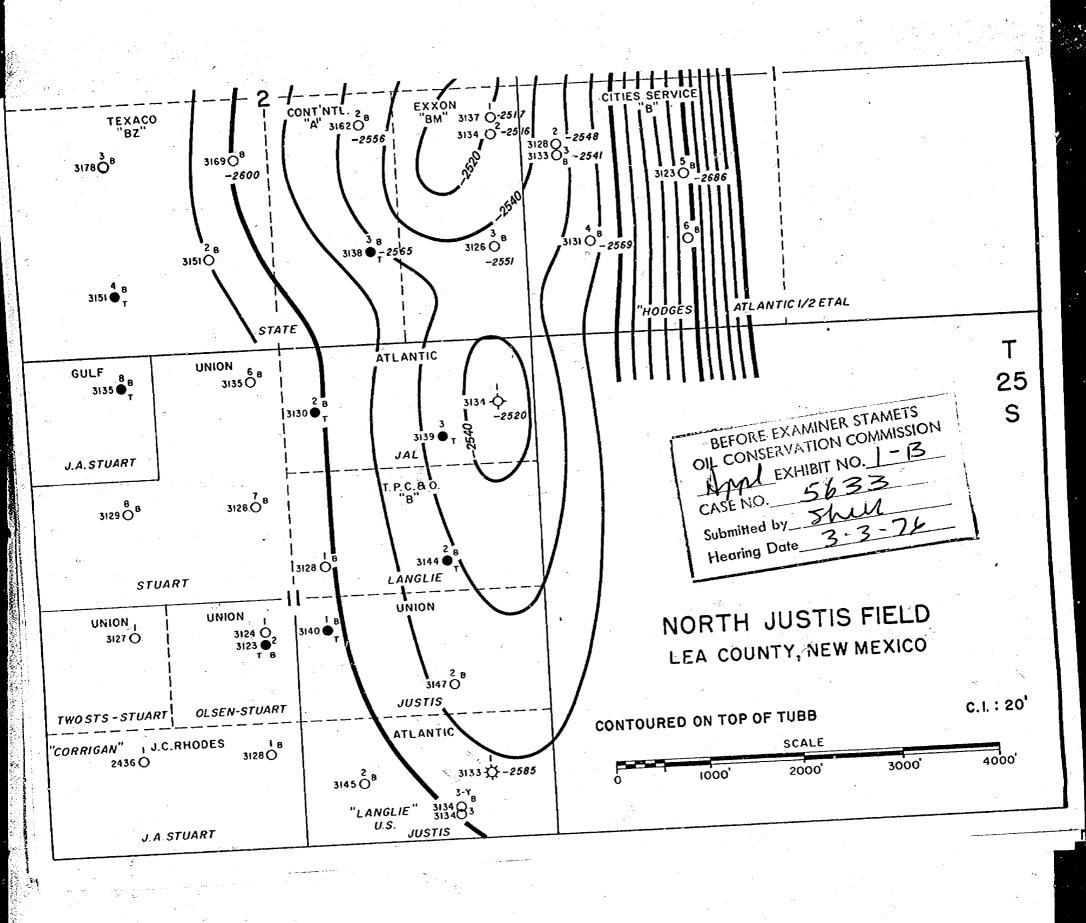
a complete record of the proceedings in the Examiner hearing of Case No. 2633

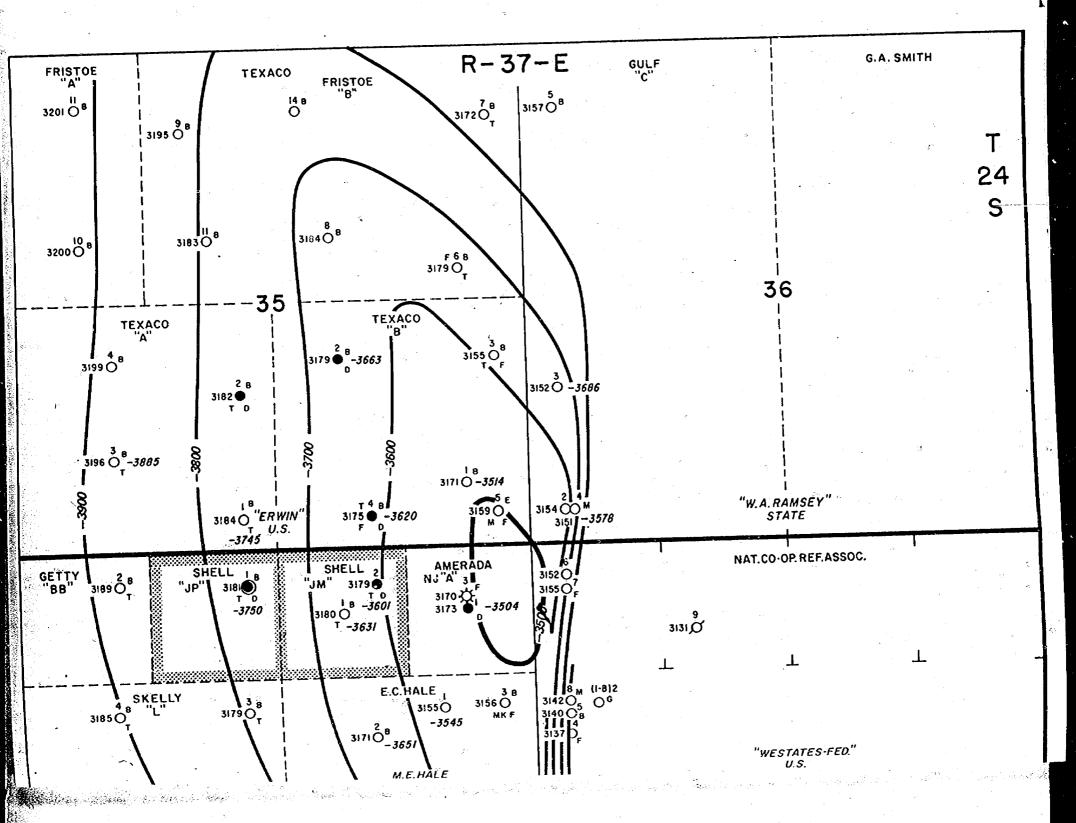
Mexico Oil Conservation Commission . Examiner

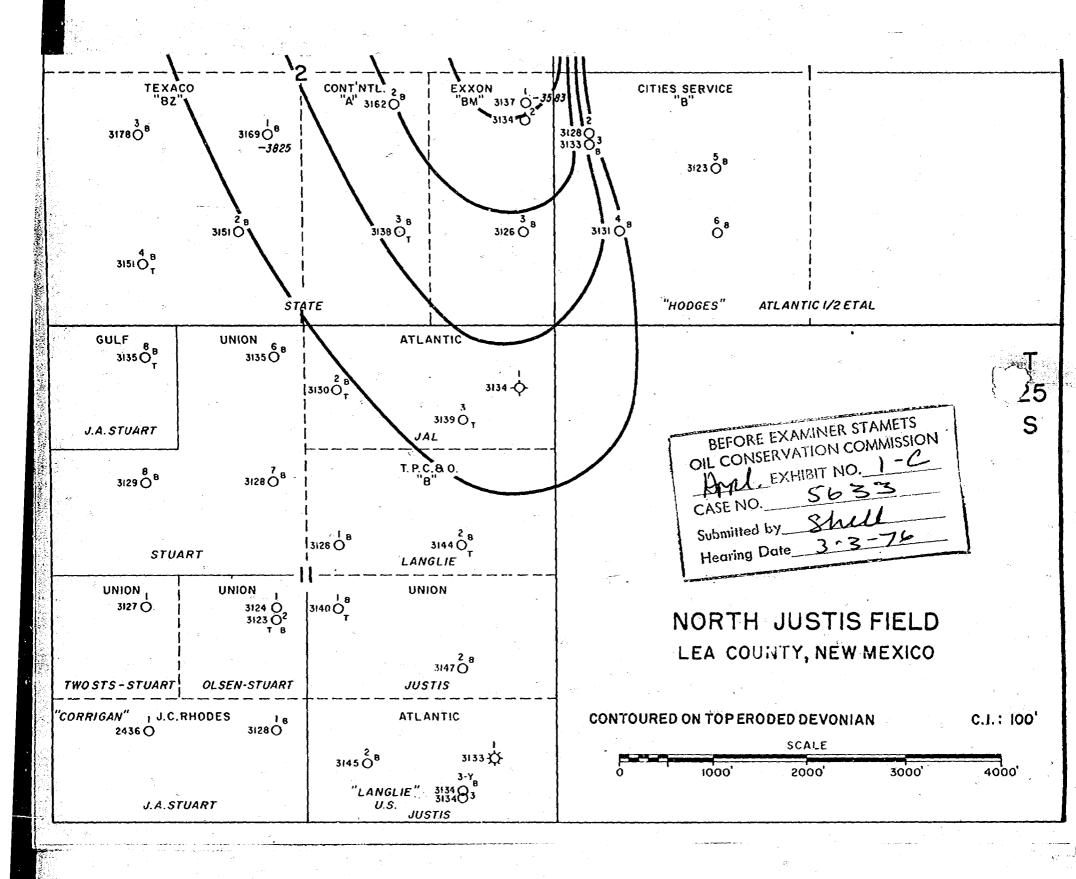




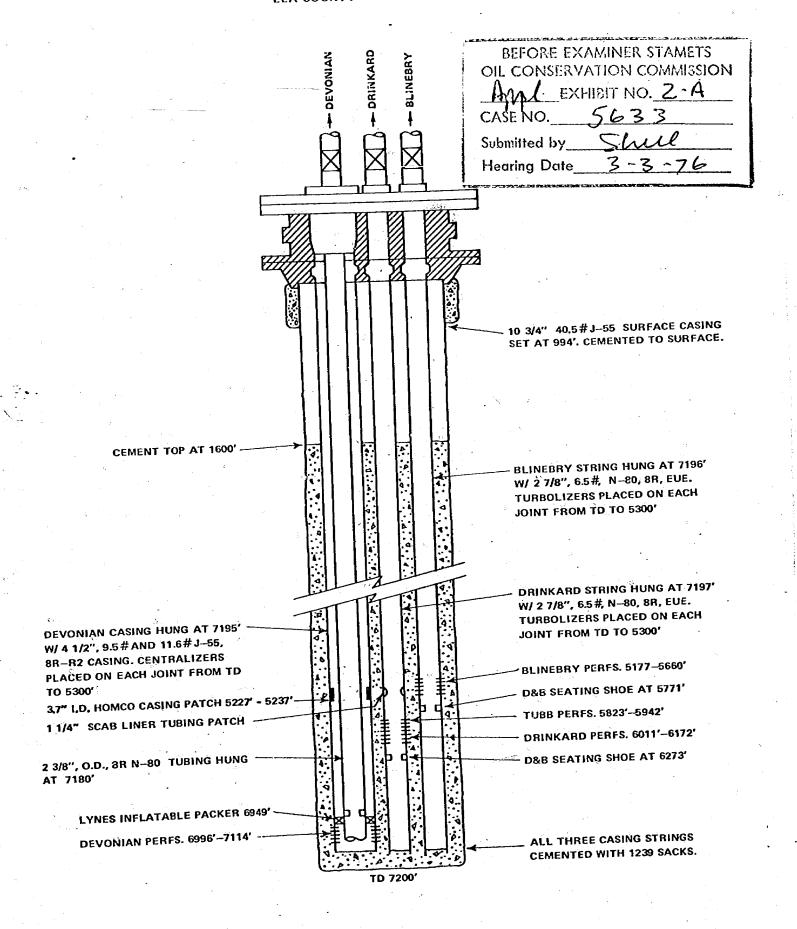




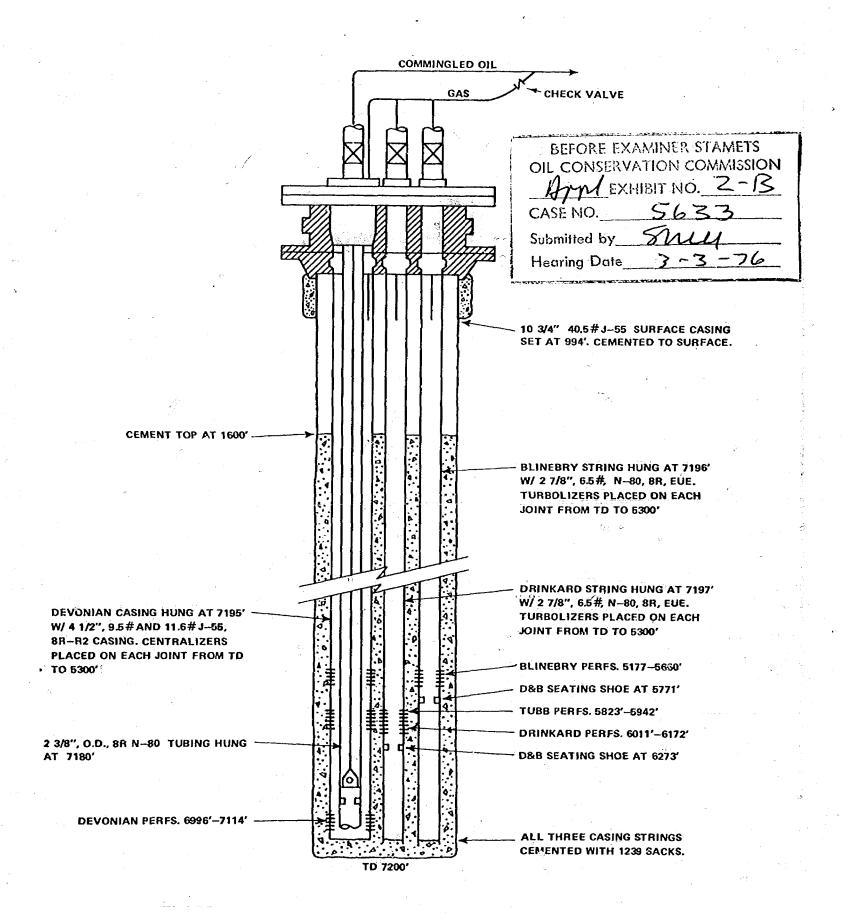




# SHELL STATE JP NO.1 PRESENT TRIPLE COMPLETION DEVONIAN-DRINKARD—BLINEBRY SECTION 2, T-25-S, R-37-E LEA COUNTY' NEW MEXICO



# SHELL STATE JP NO.1 PROPOSED COMMINGLE DEVONIAN-DRINKARD-BLINEBRY SECTION 2, T-25-S, R-37-E LEA COUNTY' NEW MEXICO



#### SHELL, JP NO. 1 LEA COUNTY, NEW MEXICO

	JUSTEN	126341													
	WELL S. T. R.	JIN	168	HAR	APRIL	PAY J	NE.	JULY	AUG	SCPT 0	CT	vua	nec	200 MP 4	CLUM
	SHELL CIT CENDANA				•••••	*****		••••••	******						
	JIO STAZES SEATE OIL	1869	1328	2337	448 2475	374 1624	1323	337 1330	5015	1339	2227	1933	1309	4580F 21817	81508
	STATE JA C 225537E CIL CAS WAT		309 1243	11 26 3668	178 3124	27719	1756 26075 90	25506 85	1251 20096 76	1371 19778 124	1373 25167	1455 15516	12716	15160K	94738
	STATE JP 16 225537E OIL GAS HAT		22921	1238	1 C72 24547	1033	256R 51289	1031	986 19076	18432	838 14915	15050	16274 162	14350F 291424 223	311639
1972	STATE UP.  1C 225537E CIL.  WAS	14575	14623 52	10264	11219	11665	25 256 152	22617 97	21575	19752	19466	15573 50	101	203814 873	120398
	STATE JP 1C 225537E OIL CAS HAT		11797	14121 14121	13689	1726 55	13909	12024	13053 32	12765	12550	11750	19469	142585 142585 418	126111
1974	STATE JP 16 225537E OIL GAS WAT	14086 29	14455 29	19403 28	9170 18	14391 26	16426 27	13698 30	12696 25	358 37631 44	17316 29	. 1725I	12346 23	5269F 174365 308	131380
1975		293 11105	254 9906 —	321 9467 35	278 10266 .20	303 9326 —	301 12774 176	347 4951 141	394 6074 117	268 2848 99	301 2809 41	393 4342 138	243 3928 33	-	135,076

	JUSTES TO	B CRERKA	RO.						*							
	MELL S T R	JAN F	EB	HAR 41	PRIL 1	AU JUA	E	ULY	2 201	EPT OC	T N	0 <b>4</b> D	EC YR-PR	CO MP AC	CUN	
	STATE JP IC 225537E DIL GAS WAT		338 1643 68	341 2306 75	328 1629 87	294 1769 74	267 3154	266 3065 67	248 2420 141	2327 2327	244 2523 70	242 2258 30	250 3050 31	3398F 27947 832	63872	
	STATE JP 1C 225537E OIL GAS WAT		2302 333	102 967 17	2760 26976 71	184	145 5813	203 8093 116	196 8504 195	7 5 3 1 7 5 3 1 1 9 2	203 10489 203	125 3858	1025	4717F 81357 925	68589	
1971	STATE JP 1C 225537E OIL GAS LAT	4010 14	6837 58	14055 123	13853	396 12938 122	2682 15	8479 65	328 9093 60	7752 87	5173 101	9726	6206 111	3522F 100844 921	69373	
1972	STATE JP 1C 225S37E OIL GAS HAT	245 5557 49	4772 53	4192 43	4044	4548	2366 51	230 2106 38	2019 45	207 1840 23	193 1808 55	2009	397 3019 64	2663F 36271 446	72936	
	STATE JP	- 61	223 1708 37	25B 2003	207 1645 25	15130 73	215 1766 57	200 1680 53	184 3175 108	3120	153 2563 75	2085 37	2376 2376 39	2824F 39354 600	74860	
1974	STATE JP IC 225537E OIL GAS- NAT	2131 20	2895 55	3671 29	si21	3977	229 4386 62	3628 3628	3840 125	174 3484 91	182 4537 89	193 4520 64	184 4202 61	2268F 46432 786	77128	
1975		205 4412 57	1 69 3771 47	225 3861 27	167 3496 47	182 3177 24	87 2103	134 5947	152 7319 24	163 5348 21	218 6361 29	117 4017	61 1975 61	:	79,006	

	JUSTIS DEVCHIAN, KORTH														
1969	STATE JP 16 225537E OIL GAS WAT	495 2560	422 2289	4 6 4 35 C 8	328 1214	401 2598	416 2961	429 2972	395 4282	2810 32	365 1301	2423	3251	4997P 32145	88786
	STATE JP 1C 225537E OIL GAS WAT	62	365 2581		352 3729	5755	373 5930 25	297 4536	364 6197 56	508 7820 102	724 21823 58	14535 35	320 5544 14	4756P 80145 352	93542
	STATE JF 16 225537E OIL GAS WAT		8761	10217	518 8658	5777	140	7526	478 6907	6071 6071	5737 51	5 8 0 5 3 0	486 6078	5925P 90394 110	99654
	STATE JP IC 225537E CIL GAS WAT		393 4674 22	249 3696	348 5280 43	261 3606 65	405 5522	432	420 4688	387 4253	434 881	3632 3632	2,555 2,503	44.92P	104136
1973	STATE JP IC 225537E OIL GAS WAT	413 3965 82	419 3983 22	3337 3735 59	356 3505 21	413 4293 31	307 3134 23	3033 21	2712 2712	387 2367 38	427 3365	2670 28	436 2369	4649P 39331 399	108784
1974	STATE JP IC 225537E OIL GAS WAT	431 3165 27	331 2472	340 3135 35	2210 13	369 2760 36	370 3014	1929 17	2456	2373	393 4197	302 3002	344 3343	4048F 34108 130	112832
1975	•	278 2513 37	197 1877	321 2294	289 2488 92	377 2803 94	232 2394	274 2503	203 2031 20	268 1826	261 1567	281 1161 21	304 1352 22		116,116

TOTAL OIL PRODUCTION
330,198

## State of New Mexico

TELEPHONE 505-827-2748





## Commissioner of Public Lands

March 1, 1976

P. O. BOX 1148 SANTA FE, NEW MEXICO 87501

PHIL R. LUCERO COMMISSIONER

> Shell Oil Company P. O. Box 1509 Midland, Texas 79701

> > Re: Downhole Commingling of Shell State JP No. 1, Justis Blinebry, Justis Tubb-Drinkard and Justis Devonian, North Pools, Unit C, Section 2, T-25-S, R-37-E Lea County, New Mexico

ATTENTION: Mr. J. D. Hughes

Gentlemen:

Your request for downhole commingling three pools in the State JP No. 1 well has been reviewed by this office.

We have no objection to your request provided you follow the New Mexico 0il Conservation requirements.

There is a Ten (\$10.00) Dollar filing fee. Please remit at your earliest convenience.

Very truly yours,

PHIL R. LUCERO

COMMISSIONER OF PUBLIC LANDS

RAY D. GRAHAM, Director

Oil and Gas Division

PRL/RDG/s

cc:

New Mexico Oil Conservation Commission BEFORE EXAMINER STAMETS Santa Fe, New Mexico

Lease No. B-1167

OIL CONSERVATION COMMISSION

Submitted by

Hearing Date\_



#### SHELL OIL COMPANY

PETROLEUM BUILDING P.O. BOX 1509 MIDLAND, TEXAS 79701

February 26, 1976

James Hull. B. 1167

Subject: Downhole Commingling of Shell State JP No. 1, Justis Blinebry, Justis Tubb-Drinkard and Justis Devonian, North Pools, Unit C, Section 2, T-25-S, R-37-E Lea County, New Mexico

Commissioner of Public Lands P. O. Box 1148 Santa Fe, New Mexico 87501

Gentlemen:

Shell Oil Company requests your support in a hearing with the Conservation Commission, March 3, 1976, at Santa Fe, New Mexico, for downhole commingling three pools in the subject well. This request is made as communication exists between the three casing strings plus the need to place all zones on artificial lift.

While opening additional pay in 1970 in the 2 7/8-inch Blinebry completion, the other two casing strings of the slim-hole cased well were inadvertently perforated. Communications were "repaired" by placing a retrievable scab liner in the 2 7/8-inch Drinkard casing and flowing the Devonian zone via the 4 1/2-inch casing from beneath a packer. Considerable problems have been experienced in maintaining pressure separations, and the retrievable tools have to be repaired periodically.

More recently the well has been produced by stop cocking, but the pressure has declined to a point where all three zones will barely flow and need to be placed on artificial lift.

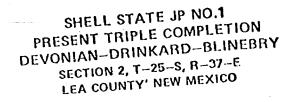
We estimate that to repair the communication problem by squeeze cementing and installing three pumping units, an expenditure of \$116,000 would be required. By downhole commingling and producing the well with a single pumping unit, an initial savings of some \$72,000 is indicated. By operating the well with a single lift system, an additional 6,000 barrels of oil will be recovered as the well will have a single economic limit due to commingling. This will increase the remaining reserves from 39,000 to 45,000 barrels of oil. If approved, we recommend that the future production be allocated on the basis of the individual zones' remaining reserves as follows: Blinebry 24% oil, 47% gas; Drinkard 22% oil, 27% gas; and Devonian 54% oil, 26% gas.

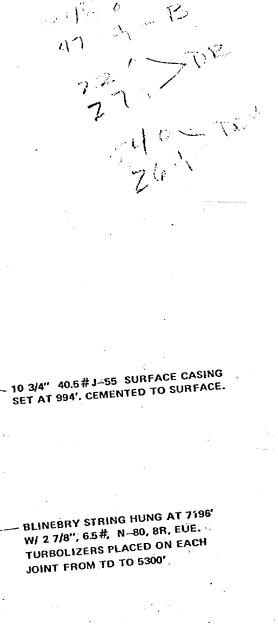
Since pressure communication again exists and there is a distinct possibility of losing the entire wellbore and reserves during squeezing operations, we request your concurrence to our proposal to deplete the well as outlined above.

Yours very truly,

J. D. Hughes
Operations Manager-Midland
Mid-Continent Division

JWH: DCW





DRINKARD STRING HUNG AT 7197' DEVONIAN CASING HUNG AT 7195' W/ 4 1/2", 9.5# AND 11.6# J-55, 8R-R2 CASING. CENTRALIZERS PLACED ON EACH JOINT FROM TD 3.7" I.D. HOMCO CASING PATCH 5227' - 5237'-1 1/4" SCAB LINER TUBING PATCH 2 3/8", O.D., 8R N-80 TUBING HUNG AT 7180' LYNES INFLATABLE PACKER 6949' DEVONIAN PERFS. 6996'-7114' TD 7200'

CEMENT TOP AT 1600'

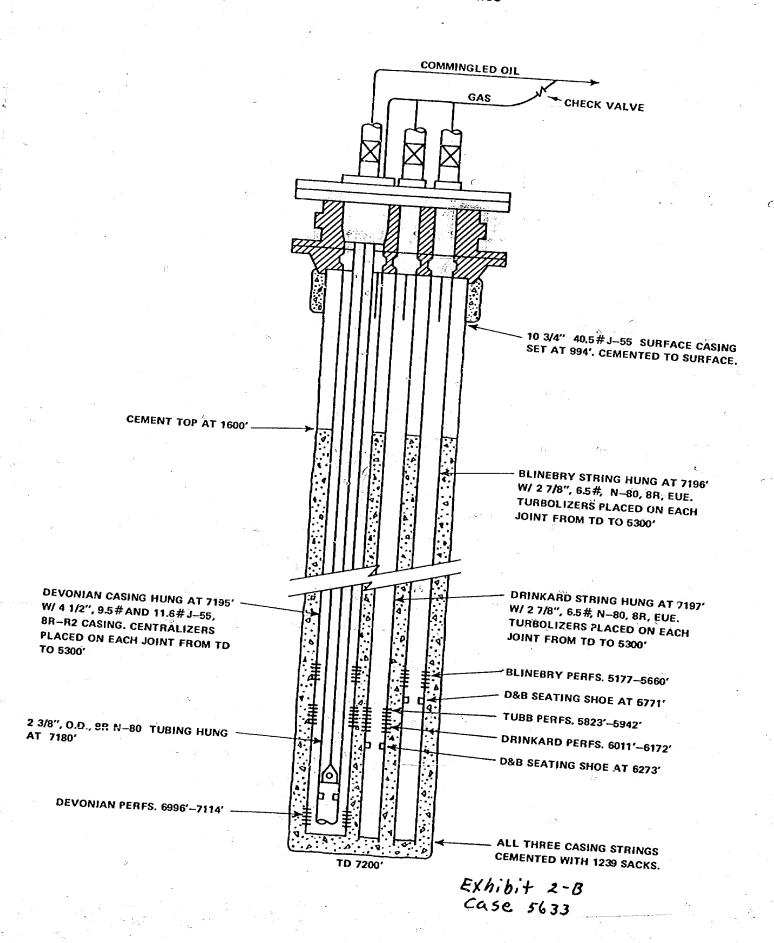
W/ 2 7/8", 6.5#, N-80, 8R, EUE. TURBOLIZERS PLACED ON EACH JOINT FROM TO TO 5300'

BLINEBRY PERFS. 5177-5660' D&B SEATING SHOE AT 5771' ិវ័UBB PERFS. 5823'—5942' DRINKARD PERFS. 6011'-6172' D&B SEATING SHOE AT 6273'

> ALL THREE CASING STRINGS CEMENTED WITH 1239 SACKS.

Exhibit 2-A case 5633

# SHELL STATE JP NO.1 PROPOSED COMMINGLE DEVONIAN-DRINKARD-BLINEBRY SECTION 2, T-25-S, R-37-E LEA COUNTY' NEW MEXICO



# SHELL, JP NO. 1

							t.E	A COU	INTY, I	NEM W	EXICO	)			•.		
	JUSTE CELERAY WELL S. T. R. JAN FEB. MAR. APRIL PAY JUNE JULY RUG SEPT OCT												NOV	066 14-	P#00 MP 4	CLUA	
	34611	ar co	THE				•••••	******	******		******		2		-		
1969	STATE	\$5553E	211 <u>5</u>	524 1609	1524	2337	2475 2475	374 1624	1323	1337	5075	1339	427	333 1086	313 1309	4580F 23117	80578
1970		2555376	0.13	406 2685	309 1243	1126	178 3124	2256 27719 75	1156 26015 90	1739 25506 86	1251 26095 76	1371 19774 124	,1322	1455	12716	14160F 162288	94738
1971	STATE	225537E	OIL GAS VAT	1286 31901 61	1025	1228 28169	1072 24557	1033 23670	2568 56289	1031 20161	986 19076	979 18432	838 14915	931 931 93050	973 16274 162	14350F 291424 223	111639
1972	STATE	385537E	CIL GAS PAI	14375	917 14633 52	19266	11519	11665	25618 152	22617 97	21575	722 19755 107	617 19466 56	15575 50	701 16979	8759F 203814 833	, 15038 <b>8</b>
19/3	31,716	1 <b>P</b> 2255371	GAS MAT	14662 59	11737	14121	13689	210 1726 55	551 13909 68	12024 57	13053 13053	12743	12550	11750 30	19469 24	5713F 142583 415	150111
1974	STATE	2255376	OIL	14084 29	14455	19403 28	9170 18	14891 26	16426	13698 30	398 12696 25	12631 44	17316 29	17251	307 12356 23	\$269F 174365 308	131380
1975				293 11105 —	254 9906	321 9467 35	278 10266 20	303 9326	301 12774 176	347 4951 141	394 6074 117	268 2848 99	301 2809 41	393 4342 138	243 3928 33		135,076
			·									:	•				
_																	

		JUSTIS T	UBB CRINK	ARD												
	HELL S	T #	, JAN	FEB	MAR .	PAIL	PAY JU!	۱ <u>۶</u>	IULY	AUG S	EPT OC	T N	0 <b>Y</b> 0	EC YR-P	ROD NP AC	CUM
1969		JP 225537E OH	1723	338 1643 68	341 2306 75	328 1629 82	294 1769 74	267 3134 67	266 3065 67	248 2420 141	210 2327 70	244 2523 70	242 2258 30	250 3059 31	3398F 27547 832	63872
1970		225537E CI	1	2302 33	1 C 2 9 6 7 1 7	2760 26976 71	4089	145 5813	203 8093 516	196 8504 195	197 1531 197	203 10489 203	3558 3558	1025	4717F 41357 928	63539
		125533E 011		6837 58	14055	13853	12938 122	2682 15	8479 65	328 9093 60	7752 87	5173 101	9726 24	6206 111	3522F 100844 921	69373
1972		225537E OLU GAS HAT	47	4772 53	4192 43	4044	4548	216 2365 51	230 2106 38	2012	207 1840 23	193 1808 55	273 2009 25	392	2663F 38271 446	72036
1973		225537E OII	1 61	1 705 3 7	258 2003	207 1655 25	15130 73	215 1766 57	200 1680 53	3175 105	119 3130 46	2563 2563	2085 37	2 3 7 8 2 3 7 8 3 9	2824F 39354 600	74860
1974	STATE	225537E 01	L 123 5 2131 7 20	166 2895 55	161 3671 29	5157 5127	3977 59	4386 62	226 3628 96	214 3880 125	314 3484 97	182 4537 89	4520	4202 61	2268F 46432 786	77128
1975	- i	*.	205 4412 57		225 3861 27		. 3177 24	87 2103	134 5947	152 7319 24	161 5348 21	218 6361 29	157 4017	61 1975 61		39,006

	JUSTIS DEVONIAN, HORTH														
	WAT		422 2289	464 35¢8	328 1214	401 2598	416 2961	429 2972	395 4 282	420 2810	1301	423 2429	3221	4997P 32145 32	88786
	STATE JP 1C 225537E OIL GAS WAT	02	365 2581		35Z 3729	5756	373 5930 25	4536	364 6197 -	508 7820 102	21823 58	-14535 35	320 5564 14	4756P 80545 352	93542
	STATE JF IC 225537E OIL GAS VAT		e 761	10217	.518 8658	5652	140 1555	7526	478 6907	433 6071 29	5737 5737	5805 30	486 6078	5925P 90394 110	99654
	STATE JP 1C 225537E CIL GAS HAT		393 4674 22	249 8696	348 5280 43	3606 65	405 5522	4913	420 4688	387 4293	434 881	399 3632 25	2555	49131 49131 155	104136
1973	STATE JP 1C 225537E DIL GAS WAT	410 3995 82	419 3983 22	357 3735 59	356 3505 21	4293 31	307 3136 23	3033 21	2712 2712	387 2367 38	427 3365 47	2670 28	436 2369	4648P 39331 393	108784
1974	STATE JP 1C 225537E OIL GAS WAI	3185 27	2472	3135 3135 35	2210	369 2760 36	370	281 1929 17	319 2458	279 2373	393 4197	302 3002	3343	4048F 34108 130	112832
1975	·	275 2513 37	197 1877	321	289 2488 92	377 2803 94	232 2384	274 2503	205 2031 20	268 1826 —	261 1567	281 1161 21	304 1352 22		116,116

TOTAL OIL PRODUCTION 330,198

## State of New Mexico

TELEPHONE 505-827-2748



PHIL R. LUCERO

COMMISSIONER



# Commissioner of Public Lands

March 1, 1976

P. O. BOX 1148 SANTA FE, NEW MEXICO 87501

Shell Oil Company

P. O. Box 1509 Midland, Texas 79701

> Re: Downhole Commingling of Shell State JP No. 1, Justis Blinebry, Justis Tubb-Drinkard and Justis Devonian, North Pools, Unit C, Section 2, T-25-S, R-37-E Lea County, New Mexico

ATTENTION: Mr. J. D. Hughes

Gentlemen:

Your request for downhole commingling three pools in the State JP No. 1 well has been reviewed by this office.

We have no objection to your request provided you follow the New Mexico Oil Conservation requirements.

There is a Ten (\$10.00) Dollar filing fee. Please remit at your earliest convenience.

Very truly yours,

PHIL R. LUCERO COMMISSIONER OF PUBLIC LANDS

BY: RAY D. GRAHAM, Director Oil and Gas Division

PRL/RDG/s

New Mexico Oil Conservation Commission

Lease No. B-1167

Exhibit 5 Case 5633

cc:



# SHELL OIL COMPANY

PETROLEUM BUILDING P.O. BOX 1509 MIDLAND, TEXAS 79701

February 26, 1976

James Hall B. 1167

Subject: Downhole Commingling of Shell State JP No. 1, Justis Blinebry, Justis Tubb-Drinkard and Justis Devonian, North Pools, Unit C, Section 2, T-25-S, R-37-民 Lea County, New Mexico

Commissioner of Public Lands P. O. Box 1148 Santa Fe, New Mexico 87501

Gentlemen:

Shell Oil Company requests your support in a hearing with the Conservation Commission, March 3, 1976, at Santa Fe, New Mexico, for downhole commingling three pools in the subject well. This request is made as communication exists between the three casing strings plus the need to place all zones on artificial lift.

While opening additional pay in 1970 in the 2 7/8-inch Blinebry completion, the other two casing strings of the slim-hole cased well were inadvertently perforated. Communications were "repaired" by placing a retrievable scab liner in the 2 7/8-inch Drinkard casing and flowing the Devonian zone via the 4 1/2-inch casing from beneath a packer. Considerable problems have been experienced in maintaining pressure separations, and the retrievable tools have to be repaired periodically.

More recently the well has been produced by stop cocking, but the pressure has declined to a point where all three zones will barely flow and need to be placed on artificial lift.

We estimate that to repair the communication problem by squeeze cementing and installing three pumping units, an expenditure of \$116,000 would be required. By downhole commingling and producing the well with a single pumping unit, an initial savings of some \$72,000 is indicated. By operating the well with a single lift system, an additional 6,000 barrels of oil will be recovered as the well will have a single economic limit due to commingling. This will increase the remaining reserves from 39,000 to 45,000 barrels of oil. If approved, we recommend that the future production be allocated on the basis of the individual zones' remaining reserves as follows: Blinebry 24% oil, 47% gas; Drinkard 22% oil, 27% gas; and Devonian 54% oil, 26% gas.

Since pressure communication again exists and there is a distinct possibility of losing the entire wellbore and reserves during squeezing operations, we request your concurrence to our proposal to deplete the well as outlined above.

Yours very truly,

That. Low J. D. Hughes

Operations Manager-Midland

Mid-Continent Division

JWH: DCW

MAR 1 9 22 AM 76 SIGNAM SEE MINGE



## SHELL OIL COMPANY

PETROLEUM BUILDING P.O. BOX 1509 MIDIAND, TEXAS 79701

February 25, 1976

TL CONSERVATION COMM. Santa Fe

Case 5633

Subject: Request for Examiner Hearing Application for Downhole Commingling of Shell, JP Well No. 1, Blinebry, Tubb-Drinkard and Devonian Pools, Unit C, Section 2, T-25-S, R-37-E, Justis Field, Lea County, New Mexico

TO OFFSET OPERATORS (See attached list)

Gentlemen:

Shell Oil Company has requested that an examiner hearing be scheduled for March 3, 1976, to consider Shell's application to downhole commingle the Blinebry, Tubb-Drinkard and Devonian Pools, Unit C, Section 2, T-25-S, R-37-E, Justis Field, Lea County, New Mexico.

The Commissioner of Public Lands has also been notified of this application.

Your support in this matter will be appreciated.

Yours very truly,

fr J. D. Hughes

Operations Manager-Midland Mid-Continent Division

JES:DCW

Attachments

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

OFFSET OPERATORS
SHELL, JP WELL NO. 1
SECTION 2, T-25-S, R-37-E
LEA COUNTY, NEW MEXICO



GETTY OIL COMPANY P. O. BOX 249 HOBBS, NM 88240

E. C. HALE P. O. BOX 763 HOBBS, NM 88240

SKELLY OIL COMPANY P. O. BOX 1351 MIDLAND, TX 79701

TEXACO INC.
P. O. BOX 3109
MIDLAND, TX 79701

Dockets Nos. 9-76 and 10-76 are tentatively set for hearing on March 17 and March 31, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 3, 1976

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,

STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stauets, Emandiner, or Daniel S. Nutter, Alternate Examiner:

#### CASE 5621: (Continued and Readvertised)

Application of El Paso Natural Gas Company, as agent for Northwest Production Corporation, for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval to commingle Basin-Dakota and Blanco-Mesaverde gas production in the wellbore of the Northwest Production Corporation Jicarilla 1198 Well No. 4, located in Unit H of Section 6, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

- In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider CASE 5631: the amendment of the Special Rules for the Bisti-Lower Gallup Oil Pool, San Juan County, New Mexico, to permit the drilling of wells in said pool at any point within a 49-acre tract not closer than 330 feet to the outer boundary thereof.
- In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of the Special Rules for the Devils Fork-Gallup Pool, Rio Arriba County, New Mexico, CASE 5632: to delete therefrom the provisions for a volumetric withdrawal formula and substitute therefor a easinghead gas equivalent formula similar to that in effect for the Angels Peak-Gallup Pool, as promulgated by Order No. R-1410-C.
- Application of Shell Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinebry, Tubb-Drinkard and Devonian production in the wellbore of its J. P. No. 1 Well located in Unit C of Section 2, Town-CASE 5633: ship 25 South, Range 37 East, Justis Field, Lea County, New Mexico.
- Application of Yates Petroleum Corporation for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Duncan Dome Unit Area comprising 7,641 acres, more or less, of State lands in Township 17 South, Ranges 17 and 18 East, Chaves County, New Mexico. CASE 5634:
- Application of Sundance Oil Company for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced water by injection into the San CASE 5635: Andres formation through the perforated interval from approximately 3852 to 3858 feet in its Ingram Federal Well No. 2 located in Unit I of Section 5, Township 8 South, Range 31 East, Tom Tom-San Andres Pool, Chaves County, New Mexico.
- Application of Julian Ard for an unoxthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled in the center of the SM/4 SE/4 of Section 32, Township 9 South, Range 37 East, West Sauyer-San Andres CASE 5636: Pool, Lea County, New Mexico, in exception to the provisions of Rule 4, Order No. R-3850.
- Application of R. C. Bennett & J. C. Ryan for a dual completion, Eddy County, New Mexico. Appli-CASE 5637: cant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Exxon-State Well No. 2, located in Unit Poof Section 25, Township 19 South, Range 28 East, Eddy County, New Mexico, to produce gas from the Upper Pennsylvanian formation through the casing-tubing annulus and gas from the Morrow formation through tubing.
- Application of Belco Petroleum Corporation for Amendment of Order No. R-5111, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Commission Order No. R-5111, which order pooled all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 5, Township CASE 5638: 22 South, Range 27 East, to be dedicated to a well drilled at an unorthodox location 660 feet from the South line and 1980 feet from the West line of said Section 5. Applicant proposes the amendment of said order to pool all such mineral interests in the formations of Mississippian and Siluro-Devonian age underlying the  $\mathbb{R}/2$  of said Section 5 and to approve the unorthodox location of the well for said formations.
- Application of Franklin, Aston & Pair for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Strawn production for its Aztec State No. 3 Well located 710 feet from the North line and 2110 feet from the East line of CASE 5639: Section 36, Township 17 South, Range 32 East, Lea County, New Mexico, and for the promulgation of special rules therefor, including a provision for 160-acre spacing units.

- CASE 5640: Application of Phillips Petroleum Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of East Brunson-Ellenburger, East Brunson-McKee and Drinkard oil production in the wellbore of its Sims No. 6 Well located in Unit M of Section 24, Township 22 South, Range 37 East, Lea County, New Mexico.
- Application of John Yuronka for salt water disposal, Lea/County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced water by injection into the Queen formation through the open-hole interval from approximately 3500 to 3875 feet in his State JC "T" Well No. 1 located in Unit B of Section 16, Township 23 South, Janua 35 East, Langue Parking Pool, Loa County, New Mexico.
- Application of Penroc Oil Corporation for downhole commingling, Eddy County, New Mexico. Appli-CASE 5642: cant, in the above-styled cause, seeks authority to commissie Canyon and Morrow production in the wellhore of its JCW-State Well No. 1, located in Unit O of Section 2, Township 20 South, Range 28 East, Eddy County, New Mexico.
- CASE 5643: Southeastern New Mexico nomenclature case calling for an order for the creation and extension of certain pools in Eddy and Lea Counties, New Mexico.
  - (a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for San Andres production and designated as the West Arkansas Junction-San Andres Pool. The discovery well is the Coquina Oil Corporation State KKN Well No. 1, located in Unit J of Section 20, Township 18 South, Range 36 East, NMPM. Said pool would comprise:

## TOWNSHIP 18 SOUTH, RANGE 36 EAST, NMPM Section 20: SE/4

(b) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Cabin Lake-Atoka Gas Pool. The discovery well is the Corinne Grace Livingston Ridge Unit Well No. 17, located in Unit L of Section 36, Township 21 South, Range 30 East, NOPM. Said pool would comprise:

#### TOWNSHIP 21 SOUTH, RANGE 30 EAST, MIPM Section 36: W/2

(c) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Grayburg-San Andres production and designated as the Cemetery-Grayburg San Andres Pool. The discovery well is the Gulf Oil Corporation Jones Federal MCT-A Well No. 1, located in Unit L of Section 14, Township 20 South, Range 25 East, NAPM. Said pool would comprise:

#### TOWNSHIP 20 SOUTH, RANGE 25 EAST, MMPM Section 14: SW/4

(d) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the North Cometery-Wolfcamp Gas Pool. The discovery well is the David Fasken Seven Rivers Federal Well No. 1, located in Unit C of Section 17, Township 20 South, Range 25 East, NMPM. Said pool would comprise:

## TOWNSHIP 20 SOUTH, RANGE 25 FAST, NOPM Section 17: N/2

(e) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the West Henshaw-Wolfcamp Pool. The discovery well is the Yates Petroleum Corporation Marco Polo EA State Well No. 1, located in Unit H of Section 32, Township 16 South, Range 30 East, NMPM. Said pool would comprise:

#### TOWNSHIP 16 SOUTH, RANGE 30 EAST, NMPM Section 32: NE/4

(f) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Queen-Grayburg and San Andres production and designated as the South Loco Hills Queen-Grayburg-San Andres Pool. The discovery well is the Gene A. Snow Alscott Well No. 1, located in Unit I of Section 31, Township 18 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NORM
Section 31: SE/4 NE/4 & NE/4 SE/4
Section 32: S/2 NW/4, N/2 SW/4, W/2 NE/4 and SE/4 NE/4

(g) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Norrow production and designated as the West Lusk-Morrow Gas Pool. The discovery well is the Adobe Oil Company Hannifin State Com Well No. 1, located in Unit P of Section 16, Township 19 South, Range 31 East, NMPM. Said pool would comprise:

## TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM Section 16: S/2

(h) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Otis-Morrow Gas Pool. The discovery well is the Apexco Inc. Walterschied Com Well No. 1, located in Unit G of Section 35, Township 22 South, Range 27 East, NYPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 27 EAST, NNPM Section 26: W/2 Section 35: All

(i) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Penasco Draw-Atoka Gas Pool. The discovery well is the Yates Petroleum Corporation Scout EH Federal Com Well No. 2, located in Unit I of Section 27, Township 18 South, Range 25 East, NMPM. Said pool would comprise:

## TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM Section 27: E/2

(j) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Scanlon-Morrow Gas Pool. The discovery well is the Harvey E. Yates Fannie Lou Federal Well No. 1, located in Unit G of Section 31, Township 20 South, Range 29 East, NMPM. Said pool would comprise:

## TOWNSHÎP 20 SOUTH, RANGE 29 EAST, NMPM Section 31: N/2

(k) CREATE a new pool in Eddy County, New Mexico, classified as a gos pool for Queen production and designated as the Square Lake-Queen Gas Pool. The discovery well is the Corpening Enterprises Exxon State Well No. 1, located in Unit M of Section 16, Township 16 South, Range 31 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 31 EAST, NMPM Section 16: SW/4

(1) EXTEND the Atoka-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH; RANGE 26 EAST, NMPM Section 21: S/2 SE/4 & E/2 SW/4 Section 28: N/2 NE/4

(m) EXTEND the North Burton Flat-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 2C SOUTH, RANGE 28 EAST, NMPM Section 13: N/2 Section 14: All

(n) EXTEND the Cabin Lake-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 30 EAST, NMPM Section 35: E/2
Section 36: W/2

(o) EXTEND the Cruz-Delaware Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 33 EAST, NMPM Section 19: NE/4

(p) EXTEND the Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM Section 25: SE/4

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM Section 30: SW/4

(q) EXTEND the La Rica-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM Section 3: All

(r) EXTEND the Paddock Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM Section 21: SW/4

(a) EXTEND the Red Lake-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM Section 24: E/2

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NHPM Section 19: W/2

(t) EXTEND the Tonto (Seven Rivers) Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM Section 13: SW/4
Section 14: S/2

(u) EXTEND the Townsend-Strawn Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM Section 4: Lots 1, 2, 7, 8, 9, 10, 15, & 16, and SE/4

(v) EXTEND the White City-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 26 EAST, NMPM Section 16: All Section 34: All

TOWNSHIP 25 SOUTH, RANGE 26 EAST, NMPM Section 3: All

CASE 5098: (Reopened) (Continued from February 18, 1976 Examiner Hearing)

In the matter of Case 5098 being reopened pursuant to the provisions of Order No. R-4682, which order established special rules for the Red Tank-Morrow Gas Pool, Lea County, New Mexico, including a provision for 640-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing.

IN THE MATTER OF THE APPLICATION OF SHELL OIL COMPANY TO COMMINGLE PRODUCTION FROM A TRIPLY COMPLETED WELL LOCATED IN SECTION 2, TOWNSHIP 25 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

No. 5633

#### APPLICATION

Comes now SHELL OIL COMPANY, and makes application to commingle production in its Shell J.P. No. 1 Well, and in support thereof states:

- SHELL OIL COMPANY is the operator of the Shell J.P. No. 1 Well located in Unit C, Section 2, Township 25 South, Range 37 East, N.M.P.M., Lea County, New Mexico.
- The said Shell J.P. No. 1 Well is presently completed and producing from the Justis Blinebry, Justis Tubb Drinkard. and Justis Devonian North pools.
- Applicant proposes to downhole commingle production 3. from the above-named three zones.

WHEREFORE, Applicant asks that this matter be set before the Commission or one of its examiners, as the Commission may desire, and that the granting of the application will prevent waste and protect correlative rights.

Respectfully submitted,

MONTGOMERY, FEDERICI, ANDREWS, HANNAHS & BUELL

Office Box Santa Fe, New Mexico 87501

IN THE MATTER OF THE APPLICATION OF SHELL OIL COMPANY TO COMMINGLE PRODUCTION FROM A TRIPLY COMPLETED WELL LOCATED IN SECTION 2, TOWNSHIP 25 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

No. 5633

#### APPLICATION'

Comes now SHELL OIL COMPANY, and makes application to commingle production in its Shell J.P. No. 1 Well, and in support thereof states:

- 1. SHELL OIL COMPANY is the operator of the Shell J.P. No. 1 Well located in Unit C, Section 2, Township 25 South, Range 37 East, N.M.P.M., Lea County, New Mexico.
- 2. The said Shell J.P. No. 1 Well is presently completed and producing from the Justis Blinebry, Justis Tubb Drinkard and Justis Devonian North pools.
- 3. Applicant proposes to downhole commingle production from the above-named three zones.

WHEREFORE, Applicant asks that this matter be set before the Commission or one of its examiners, as the Commission may desire, and that the granting of the application will prevent waste and protect correlative rights.

Respectfully submitted,

MONTGOMERY, FEDERICI, ANDREWS, HANNAUS & BUELL

Post Office Box 1307 Santa Fe, New Mexico 87501

IN THE MATTER OF THE APPLICATION OF SHELL OIL COMPANY TO COMMINGLE PRODUCTION FROM A TRIPLY COMPLETED WELL LOCATED IN SECTION 2, TOWNSHIP 25 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

No. 5633

#### APPLICATION

Comes now SHELL OIL COMPANY, and makes application to commingle production in its Shell J.P. No. 1 Well, and in support thereof states:

- 1. SHELL OIL COMPANY is the operator of the Shell J.P. No. 1 Well located in Unit C, Section 2, Township 25 South, Range 37 East, N.M.P.M., Les County, New Mexico.
- 2. The said Shell J.P. No. 1 Well is presently completed and producing from the Justis Blinebry, Justis Tubb Drinkard and Justis Devonian North pools.
- 3. Applicant proposes to downhole commingle production from the above-named three zones.

WHEREFORE, Applicant asks that this matter be set before the Commission or one of its examiners, as the Commission may desire, and that the granting of the application will prevent waste and protect correlative rights.

Respectfully submitted,

MONTGOMERY, PEDERICI, ANDREWS, HANNAHS & BUELL

Post Office Rox 2307 Santa Pe, New Mexico 87501

IN THE MATTER OF THE APPLICATION OF SHELL OIL COMPANY TO COMMINGLE PRODUCTION FROM A TRIPLY COMPLETED WELL LOCATED IN SECTION 2, TOWNSHIP 25 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

No. 5633

#### **APPLICATION**

Comes now SHELL OIL COMPANY, and makes application to commingle production in its Shell J.P. No. 1 Well, and in support thereof states:

- 1. SHELL OIL COMPANY is the operator of the Shell J.P.
  No. 1 Well located in Unit C, Section 2, Township 25 South,
  Range 37 East, H.M.P.M., Les County, New Mexico.
- 2. The said Shell J.P. No. 1 Well is presently completed and producing from the Justis Blinebry, Justis Tubb Drinkard and Justis Devonian North pools.
- 3. Applicant proposes to downhole commingle production from the above-named three zones.

WHEREFORE, Applicant asks that this matter be set before the Commission or one of its examiners, as the Commission may desire, and that the granting of the application will prevent wasts and protect correlative rights.

Respectfully submitted,

MONTGOMERY, PEDERICI, ANDREWS, HANNAHS & BUELL

Post Office Box 2307

Santa Pe, New Mexico 87501

(M)

<b>)</b>	IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:
	Order No. R- 5/75
	APPLICATION OF SHELL OIL COMPANY FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.
	ORDER OF THE COMMISSION
	BY THE COMMISSION:
	This cause came on for hearing at 9 a.m. on March 3
	19 76 , at Santa Fe, New Mexico, before Examiner Richard L. Stamets
	NOW, on this day of March , 1976 , 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, Shell Oil Company , is the
	owner and operator of the
	in Unit C of Section 2 , Township 25 South , Range
	37 East , NMPM, Lea County, New Mexico.
	(3) That the applicant seeks authority to commingle
Blinebry, Tubb-D	inkard and <u>Devonian</u> production
-6,	within the wellbore of the above-described well.
	(4) That from the Blinebry zone, the
	subject well is capable of low marginal production only.
	(5) That from the Tubb-Drinkard zone, the
	subject well is capable of low marginal production only.  (6) *
	That the proposed commingling may result in the recovery
•	of additional hydrocarbons from each of the subject pools, thereby
•	preventing waste, and will not violate correlative rights.
4	(6) That from the Devonian zone, the subject well is capable
	of low marginal production only.

,	-2- Case No. Order No. R-	;   
	(%) That the reservoir characteristics of each of the	
	subject zones are such that underground waste would not be caused	í
	by the proposed commingling provided that the well is not shut-in	ĺ
	for an extended period.	
	(8) That to afford the Commission the opportunity to assess	
	the potential for waste and to expeditiously order appropriate	
	remedial action, the operator should notify the Hobbs district	
	office of the Commission any time the subject well is shut-in for	
	7 consecutive days.	
• • • • • • • • • • • • • • • • • • • •	That in order to allocate the commingled production	
	to each of the commingled zones in the subject well, 24 preset and 47	
	percent of the commingled orland gos production/should be allocated	1
	to the Blinebry zone, 22 great and 27 percent of the	ڂ
	commingled oil production to the Tubb-Drinkard	į
production	zone, and 54 percent of the commingled oil and gus should be allocated to the Devonian zone.  IT IS THEREFORE ORDERED:	
, respectively.	(1) That the applicant, Shell Oil Company , is	
	hereby authorized to commingle Blinebry, Jubb-Drinkard	-
.1	and Devonian production within the wellbore	1
	of the J. P. Well No. 1 , located in Unit C	
t	of Section 2 , Township 25 South , Range 37	}
	East , NMPM, / Lea County, New Mexico.	
€ -	(2) That and 49 percent of the commingled offerd gos	
	production shall be allocated to the Blinebry	
	zone, 3 22 percent and 27 percent of the commingled	1
Orlan	zone, 22 perce ton d 27 percent of the commingled  dges production, shall be allocated to the Tubb-Drinkard	
	zone and sypercent of the commingle	ec
O, land gis produtis, respectivity	production shall be allocated to the Devonian zone immediately	į
	notify the Commission's Hobbs district office any time the well	1
	has been shut-in for 7 consecutive days and shall concurrently	1
	present, to the Commission, a plan for remedial action.	
	(4) That jurisdiction of this cause is retained for the entroof such further orders as the Commission may deem necessary.	y
	DONE at Santa Fe, New Mexico, on the day and year hereinabove	
4	designated.	