

CASE 3389: Application of DAVID
FASKEN for down-hole commingling, _____
Lea County, New Mexico

ASE NO.

3389

Application,

Transcripts,

Mail Exhibits

ETC.

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

P. O. BOX 2082
SANTA FE

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

May 4, 1966

Mr. J. W. Neal
Neal & Neal
Attorneys at Law
Post Office Box 278
116 North Turner
Hobbs, New Mexico

Re: Case No. 3389
Order No. R-3060
Applicant:

David Fasken

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC

Other Mr. H. D. Holloway, Texas Pacific Oil Company
Post Office Box 4067, Midland, Texas

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. 3389
Order No. R-3060

APPLICATION OF DAVID FASKEN
FOR DOWN-HOLE COMMINGLING,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 13, 1966, at Hobbs, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 4th day of May, 1966, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, 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, David Fasken, is the operator of the David Fasken Folmont Collier Well No. 1, located 1980 feet from the North line and 510 feet from the East line of Section 9, Township 11 South, Range 33 East, NMPM, Lea County, New Mexico.

(3) That said well is presently completed and equipped to produce from perforations in the North Bagley-Upper Pennsylvanian Pool from 9372 feet to 9379 feet and from 9502 feet to 9510 feet, and from perforations in the North Bagley-Lower Pennsylvanian Pool from 10,122 feet to 10,130 feet and from 10,258 feet to 10,266 feet through parallel strings of tubing, separation of the two pools being achieved by means of a packer set at 10,007 feet.

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CASE No. 3389

Order No. R-3060

(4) That the applicant proposes to remove said packer and to produce both pools simultaneously into the well-bore of the subject well, with the provision that no more than one top allowable could be produced from the well.

(5) That there are producible reserves of oil in the North Bagley-Lower Pennsylvanian Pool; that the North Bagley-Upper Pennsylvanian Pool produces large quantities of water as well as oil; and that there is danger of drowning out the Lower Pennsylvanian if the proposed commingling in the well-bore is permitted, thus causing waste and possible violation of correlative rights.

(6) That the subject application should be denied.

IT IS THEREFORE ORDERED:

(1) That the subject application is hereby denied.

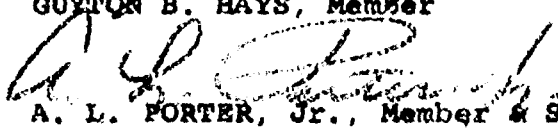
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

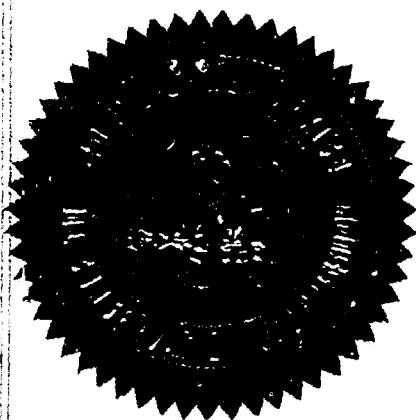
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


JACK M. CAMPBELL, Chairman


GUYTON B. HAYS, Member


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



ear/

dearnley-meier reporting services, inc.

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 13, 1966

EXAMINER

HEARING

IN THE MATTER OF:

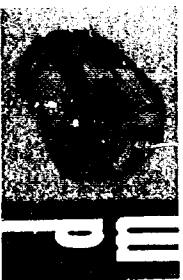
Application of David Fasken for down-hole
commingling, Lea County, New Mexico

Case No. 3389

BEFORE:

Mac Easley - Lt. Governor
A. L. (Pete) Porter - Secretary-Director

TRANSCRIPT OF HEARING



MR. NEIL: If the Commission, please, let the record show that I am J. W. Neil with the firm of Neil & Neil appearing on behalf of the applicant, Box 278 Hobbs, New Mexico. I will call one witness, Mr. Henry.

MR. PORTER: Are there any other appearances in this case?

MR. NEIL: At this time we would like to call Mr. Henry as a witness and have him be sworn as an expert. I do not believe he has testified before the Commission before.

(Witness sworn.)

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

J A M E S B. H E N R Y, called as a witness herein, having been first duly sworn on oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. NEIL:

Q State your name, please, sir?

A James B. Henry.

Q Mr. Henry, for the purpose of the record would you state your qualifications as a petroleum engineer and as an expert for the Commission.

A I received a B.S. Degree in Petroleum Engineering

from Texas Tech College in 1950. I have since been employed continuously as Petroleum Engineer; five years, Stanlan Oil and Gas Company; nine years with Anderson Prichard Oil Corporation; and two years as an independent consultant.

Q Mr. Henry, have you testified before other regulatory bodies in other States pertaining to the oil and gas matters?

A Yes, Texas, Oklahoma and Kansas.

Q Mr. Henry, have you had an occasion to examine and make a study of the field conditions of the North Bagley Pennsylvanian Fields?

A Yes, I have.

Q Are you acting as consulting engineer on behalf of Mr. Fasken?

A Yes.

MR. NEIL: We submit Mr. Henry's qualifications as an expert and an operator.

MR. PORTER: The Commission considers Mr. Henry qualified to testify.

Q (By Mr. Neil) If the Commission please, the purpose of this application is that the particular well in question is a well that has been dually completed. The production from the lower Pennsylvanian does not justify the costs of operation and we seek authority to re-work the well

and in doing so produce what oil we can from the lower Pennsylvanian along with the upper Pennsylvanian, and in fact a co-mingling of the oil but not to exceed the total allowable for the well from the upper Pennsylvanian. With that statement I would like to proceed with the testimony and the exhibits.

MR. PORTER: Your application is to co-mingle the production from three zones?

THE WITNESS: Two zones, upper Pennsylvanian and lower.

MR. PORTER: And the lower?

MR. NEIL: Yes, sir.

MR. PORTER: In an amount not to exceed the top allowable for the upper Pennsylvanian?

MR. NEIL: That's right.

Q (By Mr. Neil) I hand you what has been marked as Applicant's Exhibit Number 1. Mr. Henry, I ask you to identify Exhibit 1 for the purpose of showing what the exhibit reflects, please, sir?

A This exhibit reflects the completion data on the wells in the North Bagley Pools as shown on the April Proration Order. Those circles colored red show the uppen Pennsylvanian wells; the blue, the middle Pennsylvanian wells; and the green, the lower Pennsylvanian. And for identification

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purposes the yellow identifies two Wolfcamp completions. Note that there are at the present time two dually completed wells in the field being the David Fasken Felmont Collier which is the subject of this application.

Q At this time that is the particular area which is marked yellow?

A That is the yellow shaded area being the South half of the Northeast Quarter of Section 9, and the other dually completed well is the Texas Pacific Oil Company Collier Number 1 located in the North half of Section 10. I might add that the Texas is completed in the middle and lower, and the Fasken in the upper.

Q The well in question is the Fasken Felmont Collier which is shown by the area that is colored yellow?

A Yes.

Q Continue.

A The Texas Pacific dual completion has not produced from the middle Pennsylvanian since last September and in effect has had zero production since that time. The Fasken Felmont Collier has been shut in in the lower Pennsylvanian for approximately one month due to a failure of a bottom hole pump.

Q Mr. Henry, you have certain figures by each one of these well locations, and I ask you what are the figures

marked in red?

A The figures marked in red are depicting the barrels of oil actually produced during the month of January 1966.

Q And the figures in black, what do they reflect?

A They reflect the allowables for those wells and zones during the month of January 1966.

Q Did you receive those from the information which is heretofore filed in the Oil Conservation Commission?

A Yes, data compiled and edited by the Commission and published with the New Mexico Oil and Gas Engineering Committee.

Q Did any of the wells make a top allowable for the month that the figures are shown?

A Only the Texas Pacific Oil Company Number 1 Collier. The rest were less than the top allowable and one well, the Stoltz & Company Sinclair State Number 1, I beg your pardon, it did not make its allowable. One made it but it had an allowable less than top allowable.

Q Is there anything else on this exhibit that you have not testified to that you want to explain to the Commission?

A I believe that covers the exhibit. I might point out that both the upper and middle Pennsylvanian Zones are prorated fields with 80 acre spacing. The lower Pennsylvanian is on Statewide spacing.

Q Mr. Henry, I hand you an instrument which is marked Exhibit 2 and ask you to identify that, please, sir?

A That is an Acoustic Velocity Log of the David Fasken Felmont Collier Number 1.

Q Mr. Henry, I ask you to identify Exhibit 2, please, sir, and tell the Commission what that represents?

A This is an Acoustic Velocity Log of the David Fasken Felmont Collier Number 1. The red lettering and designation on here show the top of the upper Pennsylvanian, middle Pennsylvanian and lower Pennsylvanian zones as described in the Commission's nomenclature by correlation with the Texas Pacific Collier Number 1 which was the log that established the zoning. The squares in the center track show the perforations in the upper and lower Pennsylvanian Zones. There are no perforations in the middle Pennsylvanian Zone. The upper Pennsylvanian is perforated in two intervals, the first being from 9,372 to 9379, the second being from 9,502 to 9,510. The lower Pennsylvanian is perforated in two separate intervals, the first being 10,122 to 10,130 the second being 10,258 to 10,266.

Q Mr. Henry, when was the well completed?

A The upper pennsylvanian interval was completed November 9, 1965; the lower September 1, 1965.

Q In other words, it was dually completed?

A Yes.

Q All right. Is there any other information in that exhibit which you would care to explain to the Commission?

A I believe that's all.

Q Mr. Henry, I hand you what has been marked Exhibit 3 and ask you to identify that?

A This is a diagrammatic sketch of the dual completion equipment of the Felmont Collier Number 1. A packer is set between the upper and lower zones. It is equipped with dual hydraulic pumps. The lower zone is pumped through a string of 2 7/8" tubes and vented through a string of 1" tubes, and power oil is supplied by an inch and a half that is concentric within the 2 and 7/8.

The upper zone is produced through 2", it is vented in the casing and is supplied by 1" power oil concentric within the 2" string of tubing. This gives the well a total of 5 strings of tubing.

Q What is the approximate cost of that equipment?

A The equipment could cost in the neighborhood of \$50,000.00.

Q What has been your production history for the lower Pennsylvanian?

A The lower Pennsylvanian declined very rapidly. It is now producing in the order of 10 barrels of oil per day.

And the upper zone has declined originally from some two to three hundred barrels a day down to approximately 75 barrels a day.

MR. PORTER: That original production was as of what date, Mr. Henry?

THE WITNESS: As of the date of completion which in the upper zone was November 9, 1965; and September 1, 1965 for the lower.

MR. PORTER: What did you say the upper is now producing?

THE WITNESS: Approximately 75 barrels a day.

MR. PORTER: Thank you.

Q (By Mr. Neil) Now, Mr. Henry, from an economic standpoint can the owner of the working interest continue to produce any oil from the lower Pennsylvanian?

A The upper Pennsylvanian has had a large increase in water cut. It's necessary that it receive a larger pump in order to produce this fluid. It's impossible to install this point with the lower zone tubing in place which leaves us with the prospect of either plugging the lower zone or co-mingling it and installing a larger pump. The larger pump will accommodate the present production from the lower zone as well as the anticipated production from the upper zone.

Q From an economic standpoint you would be unable to



continue the production of the lower zone?

A That is correct.

Q If the lower zone is not produced what will have to be done in the well in order to produce the upper zone?

A It will be necessary to set a plug to seal off the perforations in the lower Pennsylvanian horizon. This would amount from an economic point of view, a permanent abandonment, because it is doubtful if the plug could be drilled and the well operated after depletion of the upper zone. At this time if the thing could be operated concurrently from the upper zone it would be economical to do so.

Q If you had to abandon the lower zone then the availability of the oil is not as such that it would justify going back in and pulling out the plug and obtaining any additional oil?

A That's correct.

Q That's your opinion of the lower zone?

A That is correct.

Q By reason, therefore, prevention of underground waste, the purpose of this application is permanent, production can be obtained from the lower zone in connection with the upper Pennsylvanian to obtain the maximum recovery of oil in the field?

A That is correct.

Q Under this particular location, but you are not asking for a greater increase in production allowable than would be attributable to the well from one pool or one zone?

A We're asking that the allowable be set at that for the upper Pennsylvanian only, and it's our opinion that this will probably be less than top allowable even with the co-mingled production, it will probably be less than the 6200 barrel per well current allowable.

Q Have you contacted the other operators in the field as to whether or not they have any objection to the procedure?

A We have contacted them. There were no objections voiced to the application.

MR. NEIL: I believe that's all.

Q (By Mr. Neil) Is there anything else, Mr. Henry, that we have not covered that you think would be pertinent to the matter to be submitted to the Commission?

A I don't believe so.

CROSS-EXAMINATION

BY MR. PORTER:

Q Mr. Henry, do you know what the current allowable for the upper Pennsylvanian Zone is, top allowable? I understand it's making 75 barrels a day?

A Top allowable for the month of April is 6230 barrels.

Q That's for the entire month?

A Yes.

Q Which is about 200 barrels a day?

A Yes, sir.

Q Have you made any calculations as to what you think, how much oil you think might be left in the ground in the event the lower is abandoned?

A 20,000 barrels.

Q On this particular acreage?

A Yes, sir. I might point out that there are only two lower Pennsylvanian completions.

Q Only two lower Pennsylvanian completions in the pool?

A Right at this time.

MR. PORTER: Anyone else have a question of Mr. Henry?

CROSS-EXAMINATION

BY MR. NUTTER:

Q Mr. Henry, I believe you stated you had a water production problem?

A Yes.

Q With your 2,298 barrels of oil produced in January how much water was produced?

A Very little produced, that's our problem now. We're not moving enough water. We produced 50 percent water which

would be an equal--I have the figure if you would excuse me just a moment. This record does not show the water production. Apparently it was omitted, but it is something less than 50 percent at the present time.

Q Somewhere in the neighborhood of 50 percent?

A Yes.

Q You've got 2 7/8" tubing; what means of pumping are you currently using on the upper pump?

A A Cobe pump set in the 2 7/8" tube with power set in by a power string of macaroni.

Q You've got a production tubing string to the lower and a power oil string to the upper?

A Two power oil strings, two production strings and a vent string.

Q What kind of water production do you have in the lower Pennsylvanian?

A It's approximately 50 percent now, it's very little, very little fluid being moved from either of them. Neither of them are representative tests. Both pumps are badly worn and it's time to change them out.

Q Do you think it's possible that with larger equipment that the lower zone would produce at a higher rate, both water and oil?

A We hope so, but we've been able to produce it, pump

action is as good, we have it vented and at present we see no prospect of it at the present time.

Q You must been making only about fifteen barrels a day?

A That is correct.

Q What would be the capacity?

A It has a capacity of 450 barrels a day.

Q Why isn't it picking up more fluid than this?

A There's none in the well core. Initially it did produce more fluid, and on drill stem tests and production tests it was a big fluid procedure. Both of those zones have been treated and re-treated with acid, and we have not as yet been able to increase that production.

Q You say you hoped to increase it with the installation of the larger equipment?

A From the upper. The upper is 280 barrels a day and this is not sufficient to handle the water from the upper zone that we feel we have in the well, and also from the larger increases we have seen in offset from the producing well. The South offset produces 900 barrels a day from the upper zone.

MR. PORTER: This is 10 to 15 barrels a day to salvage from the lower that you are presently producing?

THE WITNESS: Yes, sir, the North Bagley is

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characterized by water production and many of the wells that are producing in the range of one to two hundred barrels of oil a day are handling 70 barrels of water a day.

Q (By Mr. Nutter) Have you considered what might happen if this water be dumped in the lower and what damage might be done?

A With a 4" casing pump I do not believe there would be any migration between the zones in this pumped off condition.

Q Is it possible with the installation of the type of equipment you're talking about, a 4" Cobe pump, to install, I'm not acquainted with the actual name for it, but Odis and Baker have equipment to permit the co-mingling in the well bore, of fluids, by two zones separated by a packer. Have you investigated the installation of this type of equipment?

A We have not. I know that it is available but we did not figure that the economics nor the mechanical condition of the well would require it to prevent the migration.

Q Do you know whether the installation of this type of equipment is compatible with Cobe pumping equipment or not?

A No, sir, I do not.

Q You haven't investigated that either?

A It would preclude our setting of the pump at a lower depth and I suppose a back pressure valve could be set.

Q What is the anticipated depth you set your pump upon approval?

A We have at the present time anticipated setting it above the top perforation which would be approximately 9500 feet.

Q Then, in other words, you would keep the well pumped off down the 9500 feet?

A Yes, sir.

Q Thank you.

MR. PORTER: Anyone else have a question of the witness? Mr. Neil, did you want to offer your exhibits?

MR. NEIL: Yes, sir, I would like to offer Exhibits 1, 2 and 3 which have been testified to by this witness.

(Whereupon, Applicant's Exhibits 1, 2 and 3 offered into evidence.)

MR. PORTER: Were the exhibits prepared by you?

THE WITNESS: Yes, sir.

MR. PORTER: The exhibits will be admitted into evidence and the witness may be excused.

(Whereupon, Applicant's Exhibits 1, 2 and 3 admitted into evidence.)

MR. PORTER: Does anyone have a statement to make in this case? If there is nothing further to be offered we'll take the case under advisement and take a ten minute recess.

I N D E X

<u>WITNESS:</u>	<u>PAGE</u>
JAMES B. HENRY	
Direct Examination by Mr. Neil	2
Cross-Examination by Mr. Porter	11
Cross-Examination by Mr. Nutter	12

E X H I B I T S

<u>NUMBER</u>	<u>MARKED FOR IDENTIFICATION</u>	<u>OFFERED</u>	<u>ADMITTED</u>
Applt's 1.	2	16	16
Applt's 2.	2	16	16
Applt's 3.	2	16	16

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STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, BOBBY J. DAVIS, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, I have affixed my hand and
notarial seal this 22nd day of April, 1966.

Bobby J. Davis
NOTARY PUBLIC

My Commission Expires:

March 13, 1969.

TEXAS PACIFIC OIL COMPANY

P. O. Box 4067
Midland, Texas
April 14, 1966

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

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

Re: Case No. 3389, OCC Hearing
April 13, 1966

Gentlemen:

Texas Pacific Oil Company, an operator in the North Bagley Penn Pools Area, Lea County, New Mexico, does not oppose the application of David Fasken to commingle in the well bore production from the North Bagley Upper Penn and North Bagley Lower Penn oil pool in his Felmont-Collier #1 so long as the terms so stated in the application are used as a basis for allowable determination for the specified well.

The above application was heard at the subject hearing conducted Wednesday, April 13, in Hobbs, New Mexico.

Yours truly,


H. D. Holloway
District Engineer

HDH:mc

cc: Sheldon Ward
J. R. Clark

HENRY ENGINEERING
Petroleum Engineers
807 FIRST NATIONAL BANK BUILDING
MIDLAND, TEXAS 79704
March 7, 1966

MAR 10 PM 1966

Handwritten:
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10:00 AM
1966
H 9-11 S-33F
LEA

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico
Attention: D. S. Nutter

Re: Hearing for Bore-Hole
Commingling of Production
North Bagley Upper Penn,
Middle Penn, Lower Penn
Reservoirs.

Gentlemen:

On behalf of our client, David Fasken, we hereby request that you set for hearing their application for Bore-Hole Commingling of the North Bagley Upper Penn, Middle Penn, and Lower Penn Reservoirs, Lea County, New Mexico; provided that no more than one allowable may be produced from any well having Bore-Hole Commingling approved. We would appreciate this matter being set for hearing at the earliest possible date.

Yours very truly,
HENRY ENGINEERING

James B. Henry

James B. Henry

JBH:bh

cc: Stoltz & Company
Texas Pacific Oil Company
Felmont Oil Corporation
Cabot Corporation
B T A Oil Producers
Chas. Gillispie
Sam Boren

DOCKET MAILED

Date 3-29-66

DOCKET: REGULAR HEARING - WEDNESDAY - APRIL 13, 1966

OIL CONSERVATION COMMISSION - 9 A.M., THE INN MOTOR HOTEL, CONVENTION CENTER,
200 SOUTH LINAM, HOBBS, NEW MEXICO

- ALLOWABLE (1) Consideration of the oil allowable for May, 1966;
- (2) Consideration of the allowable production of gas for May, 1966, from thirteen prorated pools in Lea, Eddy, and Roosevelt Counties, New Mexico. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for May, 1966.

CASE 3389: Application of David Fasken for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle in the wellbore, production from the North Bagley-Upper Pennsylvanian, North Bagley-Middle Pennsylvanian, and North Bagley-Lower Pennsylvanian Oil Pools in his Felmont Collier Well No. 1, located in Unit H of Section 9, Township 11 South, Range 33 East, Lea County, New Mexico, with the provision that no more than one top allowable could be produced from said well.

CASE 3376: Application of T. E. Brown, Jr. and Claudyne Brown Thorp for compulsory pooling, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order pooling all oil and gas mineral interests in the Lusk-Strawn Pool underlying the NE/4 of Section 7, Township 19 South, Range 32 East, Lea County, New Mexico. Said order to be effective the date of first production from said land and pool.

CASE 3390: Application of Pan American Petroleum Corporation for special rules for the East Hightower-Lower Pennsylvanian Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the East Hightower-Lower Pennsylvanian Pool, Lea County, New Mexico, including a provision for 80-acre proration units.

CASE 3391: Application of The Atlantic Refining Company for three waterflood projects, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project on each of three separate contiguous leases, pending unitization, by the injection of water into the Yates and Upper Queen formations, Shugart Pool, through five wells located in Sections 34 and 35, Township 18 South, Range 31 East, Eddy County, New Mexico. Applicant further seeks an administrative procedure whereby the project areas could be consolidated or expanded to include other lands upon unitization and whereby additional injection wells could be approved.

CASE 3392: Southeastern New Mexico nomenclature case calling for an order for the creation, extension and contraction of certain pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.

a) CREATE A new gas pool for San Andres production designated as the South Crossroads-San Andres Gas Pool. The discovery well is W. K. Byrom, T. P. State No. 1, located in Unit K of Section 10, Township 10 South, Range 36 East, NMPM. Said pool described as:

TOWNSHIP 10 SOUTH, RANGE 36 EAST, NMPM
SECTION 10: SW/4

APRIL 13, 1966, REGULAR HEARING

- b) EXTEND the Chaveroo-San Andres Pool to include therein:

TOWNSHIP 7 SOUTH, RANGE 33 EAST, NMPM
SECTION 24: SW/4
SECTION 25: W/2
SECTION 26: S/2
SECTION 28: NE/4
SECTION 35: NW/4

- c) EXTEND the South Corbin-Queen Pool to include therein:

TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM
SECTION 34: N/2

- d) EXTEND the Jenkins-Cisco Pool to include therein:

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM
SECTION 25: NW/4

- e) EXTEND the Justis-Blinebry Pool to include therein:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM
SECTION 26: SW/4

- f) EXTEND the Merton-Lower Wolfcamp Pool to include therein:

TOWNSHIP 15 SOUTH, RANGE 34 EAST, NMPM
SECTION 12: SE/4

- g) EXTEND the Querecho Plains-Pennsylvanian Pool to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
SECTION 15: SW/4
SECTION 22: NW/4

- h) EXTEND the Scarborough-Yates-Seven Rivers Pool to include therein:

TOWNSHIP 26 SOUTH, RANGE 37 EAST, NMPM
SECTION 30: SW/4

- i) EXTEND the Indian Basin-Upper Pennsylvanian Gas Pool to include therein:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM
SECTION 29: All
SECTION 32: All

- j) CONTRACT the Red Lake Pool by the deletion therefrom of the following lands:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM
SECTION 31: SE/4 NE/4 and E/2 SE/4

APRIL 13, 1966, REGULAR HEARING

k) EXTEND the Artesia Pool to include the lands deleted from the Red Lake Pool in Paragraph (j) above.

l) EXTEND the Linda-San Andres Pool to include therein:

TOWNSHIP 7 SOUTH, RANGE 26 EAST, NMPM
SECTION 8: N/2 NE/4

CASE 3393: Northwestern New Mexico nomenclature case calling for an order for the abolishment, creation and extension of certain pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

a) ABOLISH the Rattlesnake-Pennsylvanian "B" Gas Pool which comprises the following-described area:

TOWNSHIP 29 NORTH, RANGE 19 WEST, NMPM
SECTION 2: S/2
SECTION 11: N/2

b) ABOLISH the Rattlesnake-Pennsylvanian "CD" Oil Pool which comprises the following-described area:

TOWNSHIP 29 NORTH, RANGE 18 WEST, NMPM
SECTION 18: S/2 NW/4 and SW/4
SECTION 19: N/2 NW/4 and W/2 NE/4

TOWNSHIP 29 NORTH, RANGE 19 WEST, NMPM
SECTION 1: SW/4
SECTION 2: E/2 and E/2 SW/4
SECTION 11: E/2 NW/4 and NE/4
SECTION 12: NW/4, E/2 SW/4 and SE/4
SECTION 13: NE/4

c) CREATE the Rattlesnake-Pennsylvanian "BCD" Oil Pool with vertical limits being from 6404 feet to 6827 feet on the log of the Continental Oil Company Rattlesnake Well No. 136, located in Unit J of Section 2, Township 29 North, Range 19 West, San Juan County, New Mexico, and with horizontal limits described as follows:

TOWNSHIP 29 NORTH, RANGE 19 WEST, NMPM
SECTION 2: S/2
SECTION 11: N/2
SECTION 12: All

d) EXTEND the Ballard-Pictured Cliffs Pool to include therein:

TOWNSHIP 24 NORTH, RANGE 6 WEST, NMPM
SECTION 17: NW/4
SECTION 18: NE/4

e) EXTEND the South Blanco-Pictured Cliffs Pool to include therein:

TOWNSHIP 23 NORTH, RANGE 2 WEST, NMPM
SECTION 14: SW/4
SECTION 15: W/2 and SE/4
SECTION 22: NE/4
SECTION 23: S/2

- 4 -

APRIL 13, 1966, REGULAR HEARING

TOWNSHIP 25 NORTH, RANGE 4 WEST, NMPM
SECTION 1: SE/4
SECTION 2: SE/4

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM
SECTION 3: SW/4
SECTION 10: N/2 and SE/4

f) EXTEND the Blanco-Mesaverde Pool to include therein:

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM
SECTION 10: E/2

TOWNSHIP 26 NORTH, RANGE 6 WEST, NMPM
SECTION 17: All
SECTION 18: All
SECTION 20: N/2
SECTION 21: N/2

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM
SECTION 13: S/2

TOWNSHIP 27 NORTH, RANGE 9 WEST, NMPM
SECTION 26: W/2

g) EXTEND the South Blanco-Tocito Oil Pool to include therein:

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM
SECTION 18: SE/4
SECTION 19: NE/4
SECTION 20: N/2

DAVID FASKEN
Felmont-Collier #1
510' FEL, 1980' FNL
Sec. 9, T11S, R33E, NMPM
Lea Co., N. Mex.

Diagrammatic Sketch of
Dual Completion

359' 13 3/8" O.D. Csg. set & cemented w/350 sts.

1792' Top of cement 9 5/8" csg.

3892' 9 5/8" O.D. Csg. set & cemented w/600 sts.

7816' Top of cement 7" csg.

9053' (-4783) Top of Upper Penn.

9372'
9379' Upper Penn. perforations

9502'
9510' Upper Penn. perforations

2 3/8" O.D. "SealLock" Tubing set @ 9622'
(Production string for Upper Penn.)

9667' (-5397) Bottom of Upper Penn.

1" O.D. Integral Joint Tubing set in packer @ 10,007'
(Vent string for Lower Penn.)

2 7/8" O.D. Butress Tubing (Production string for Lower Penn.)

9997' (-5727) Top of Lower Penn.

10,007' Top of Baker Oil Tool Model "J" Setdown Packer

2 7/8" O.D. Bnd. EUE Tubing used for tail pipe Set on bottom

10,122'
10,130' Lower Penn. perforations

10,258'
10,266' Lower Penn. perforations

10,290' R.B.T.D.

10,326' 7" O.D. Csg. set & cemented w/600 sts. Drillers T.D.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Exhibit No.

Case No.

3389