CASE 2597: Application of CONTINENTAL for permission to triple complete its HAWK B-3 WELL NO. 21, in Unit L.

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plistin, Transcript, mill Exhibits, Etc.

## OIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

August 21, 1962

Mr. V. T. Lyon Continental Gil Company Box 1377 Roswell, New Mexico

Dear Mr. Lyon:

Reference is made to our telephone conversation of this date wherein you requested that your Hawk B-3 Well No. 22, located in Unit L, Section 3, Township 21 South, Range 37 East, MMPM, Les County, New Mexico, be substituted for your recently junked Well No. 21, located in the same quarter-quarter section as the subject well of Order No. R-2287, entered by the Commission July 17, 1962, in Case No. 2597. Said order authorized the triple completion of the No. 21 well in the Blinebry, Tubb and Drinkard Peols.

The substitution requested is hereby authorized.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/DSM/ir

cc: Mr. Joe D. Ramey Gil Conservation Commission Hobbs, New Mexico

Case Pile No. 2597

### BEFORE THE OIL COMSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL COMSERVATION COMMISSION OF MEW MEXICO FOR THE PURPOSE OF COMSIDERING:

> CASE No. 2597 Order No. R-2287

APPLICATION OF CONTINUETAL OIL COMPANY FOR APPROVAL OF A TRIPLE COMPLETION, LEA COUNTY, NEW MAKICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on Jaly 11, 1962, at Santa Fe, New Memico, before Deniel S. Butter. Exemiser duly appointed by the Oil Conservation Commission of New Memico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 17th day of July, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Rutter, and being fully advised in the premises,

### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Continental Oil Company, seeks permission to complete its Hawk B-3 Well No. 21, located in Unit L of Section 3, Township 21 South, Range 37 Rast, MOPM, Lea County, New Mexico, as a triple completion (conventional) in the Blinebry, Tubb and Drinkard Pools with the production of hydrocarbons from the Blinebry and Tubb zones and the production of oil from the Drinkard zone to be through parallel strings of 2 1/16-inch tubing.
- (3) That the mechanics of the proposed triple completion are feasible and in accord with good conservation practices.
- (4) That approval of the subject application will neither cause waste nor impair correlative rights.

### IT IS THEREFORE ORDERED:

(1) That the applicant, Continental Oil Company, is hereby authorized to complete its Hawk B-3 Well No. 21, located in Unit L

-2-CASE No. 2597 Order No. R-2287

of Section 3, Township 21 South, Range 37 East, MMMM, Lee County, New Mexico, as a triple completion (conventional) in the Blimsbry. Tubb and Drinkard Pools with the production of hydrocarbons from the Blimsbry and Tubb zones and the production of oil from the Drinkard zone to be through parallel strings of 2 1/16-inch tubing.

PROVIDED MONEYER, That the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations.

PROFIDED FURTHER. That the applicant shall take packerleakage tests upon completion and annually thereafter during the Gas-Oil Ratio Test Fariod for the Drinkard formation.

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

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

> STATE OF NEW MEXICO OIL COMSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

smalher

B. B. MALKER, Monday

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



GOVERNOR EDWIN L. MECHEM CHAIRMAN

# State of New Wexico Oil Conservation Commission

LAND COMMISSIONER E. S. JOHNNY WALKER MEMBER



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

P. Q. BOX 67 Banta Fe

July 17, 1962

Re:

Mr. Mobert E. Fox Relighin & Fox Attorneys at Law Box 1713 Santa Fe, New Nexico Case No. <u>2597</u> Order No. <u>R-2287</u>

Applicant:

CONTINENTAL OIL COMPANY

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. Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC X

Aztec OCC \_\_\_\_

OTHER\_

### DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 11, 1962

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Elvis A. Utz, as alternate Examiner:

CASE 2595

Application of Humble Oil & Refining Company for approval of a unit agreement, Eddy County, New Mexico. Applicant, in the above styled cause, seeks approval of the Cedar Hills Unit Agreement comprising 1,440 acres of State land in Township 21 South, Range 27 East, Eddy County, New Mexico.

CASE 2596:

Application of Humble Oil & Refining Company for approval of a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its F. F. Hardison "B" Well No. 2, located in Unit A of Section 34, Township 21 South, Range 37 East, Lea County, New Mexico, as a dual completion (conventional) in the Blinebry Oil Pool and in the Tubb Gas Pool, with the production from each zone to be through parallel strings of 14 inch tubing.

CASE 2597:

Application of Continental Oil Company for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Hawk B-3 Well No. 21, located in Unit L of Section 3, Township 21 South, Range 37 East, Lea County, New Mexico, as a triple completion (conventional) in the Blinebry, Tubb and Drinkard Pools, with the production of oil from all zones to be through parallel strings of 2 1/15 inch tubing.

CASE 2598:

Application of W. K. Byrom for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force pooling all mineral interests in a 160-acre gas unit comprising the NE/4 of Section 23, Township 18 South, Range 36 East, Arkansas Junction-Queen Gas Pool, Lea County, New Mexico.

CASE 2599:

Application of James N. Evans and Dallas McCasland, d/b/a Precision Pump and Supply and McCasland Hot Oil Service, for a permit pursuant to Rule 312 to construct a plant to reclaim sediment oil near the town of Eunice, in Lea County, New Mexico.

-2-Docket No. 20-62

CASE 2600:

Application of Southwest Production Company for a force pooling order, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order force pooling all mineral interests in the Basin-Bakota Gas Pool underlying the W/2 of Section 10, Township 30 North, Range 11 Mest, San Juan County, New Mexico, to be dedicated to a well which has been completed in the NE/4 SM/4 of said Section 10.



# CONTINENTAL OIL COMPANY 41 > 50

P. O. Box 1377 Roswell, New Mexico June 15, 1962

New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr., Secretary-Director

Gentlemen:

Re: Application For Triple Completion - Hawk B-3 No. 21

We forward herewith in triplicate an application for triple completion of our Hawk B-3 No. 21 in the Blinebry, Tubb and Drinkard Pools. In as much as this proposal will require a hearing, offset operators are not being furnished copies of this application.

Since this well has not yet been drilled, we are unable to furnish electric logs at this time. They will be forwarded as soon as

We would appreciate your setting this for hearing at the earliest possible date.

Yours very truly,

A. B. Slaybaugh Assistant Division Superintendent

MH-SG

Enc.

### NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

### APPLICATION FOR MULTIPLE COMPLETION

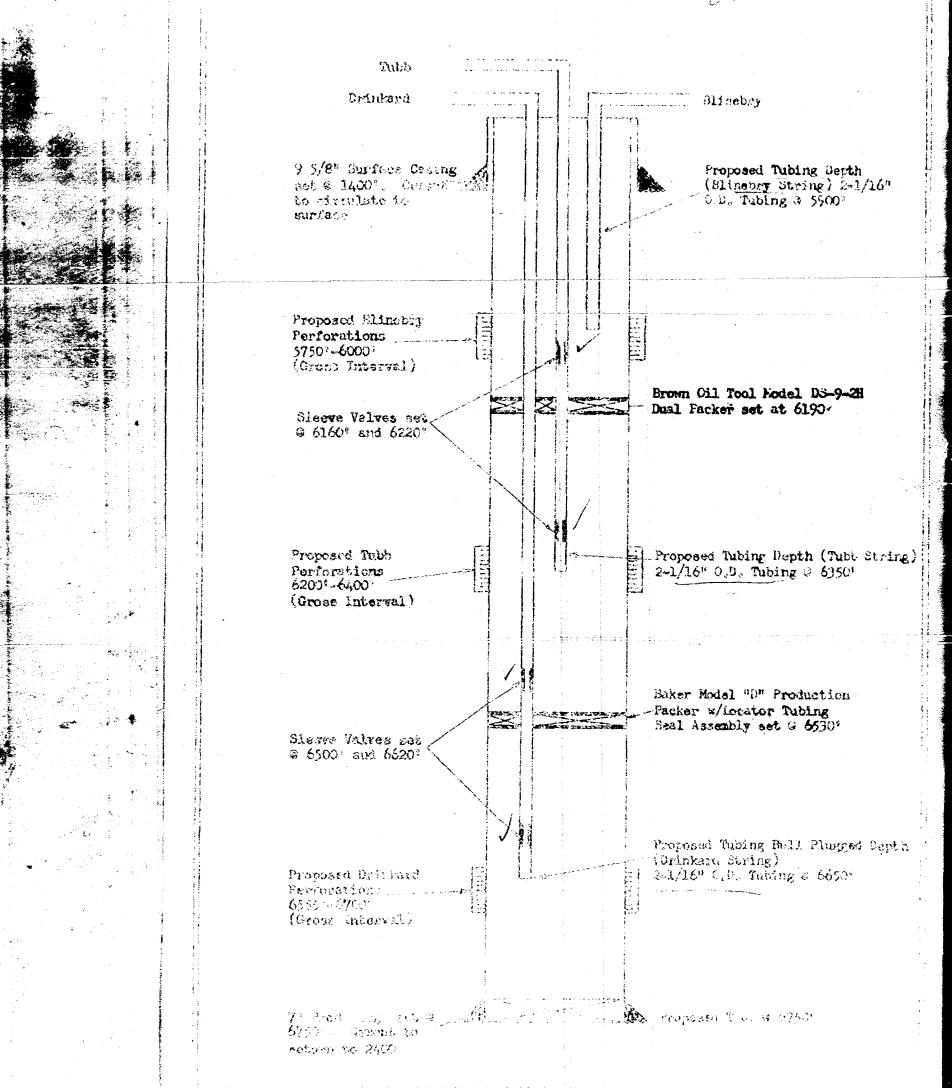
Mar 5913-1-61

	APPLICATION FOR IN	OF IN TELECOMA LETION	200
Operator Continental Oil	Company	County	0-15-62
Address Box 1377, Roswell	l, New Mexico	Lease Hawk B-3	9e# No. 21
	ection 3	ownship T-21S	Range R-37E
1. Has the New Mexico Oil Conservation	s Commission beretofore aut	horized the multiple completion o	
same zones within one mile of the su	blect well? YES X N	<u> </u>	
2. It answer is yes, identify one such in			
Shell Oil Company, Li Shell Oil Company, Li			
3. The following facts are submitted:	Upper Zore	Intermediate Zone	Lowet Zone
a. Name of Pool and Formation	linebry: Blineb	ry Tubb: Tubb	Drinkard: Drin
b. Top and Bottom of Pay Section	57501-60001	62001-6400	
(Perforations)  c. Type of production (Oil or Gas)	Oil (Anticipate	d) Oil (Anticina)	ted) Dil (Anticipater
d. Method of Production	CAT TURNATURA	AT ATT THINKIET DG	men' par tanatorbase
(Flowing or Antificial Bift)	Flow (Anticipat	ed) Flow (Anticipa	ated)Flow (Anticipate
. The following are attached. (Please n	nark YES of NO)		••
have been furnished copies	s of the application, * or other acceptable log with to available at the time applica a which this well is located	ops and bottoms of producing zon tion is filed, it shall be submitte together with their correct mailin	ng address,
	•		
	·		
Were all operators listed in Item 5 above	re notified and furnished a co	opy of this application? YES	NOX If answer is yes, give d
ASSIS CERTIFICATE: 1, the undersigned, st	ate that I am the UIVISI		
ider my supervision and direction and tha			eport; and that this report was prepared he best of my knowledge.
		as Slay	
Should waivers from all offset open Commission will hold the application	rators not accompany an appi ion for a period of twenty (20	ication for administrative approv	Signathure val, the New Mexico Oli Conservation the Commission's Santa Fe office. If,
	otest not request for hearing n will result in an unorthodo	is received by the Santa Fe offic x well location and/or a non-stan	ice, the application will then be proce adard protation unit in either or both o

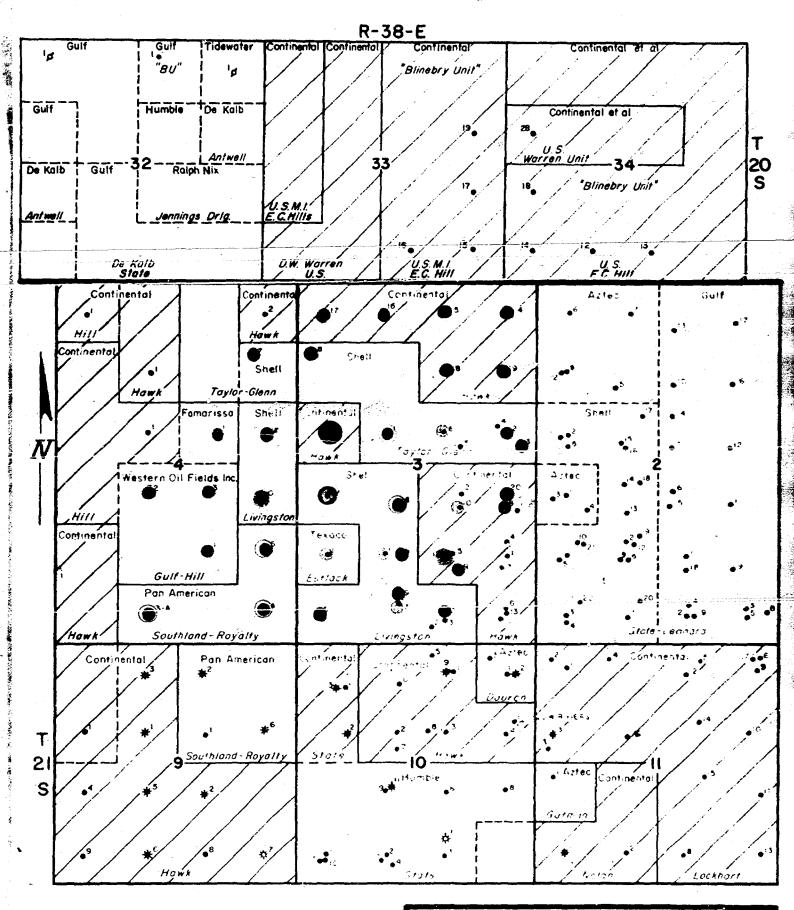
NMOCC-3 Shellxollxl WAM FILE

FARK 8-3 110 21

Mar 2591



Jan 25 97



- Proposed Location
- Blinebry 011
- Tubb Oil
- Terry Blinebry
- Blinebry Gas
- Tubb Cas Brunson
  - Haro
  - Drinkard Wantz Abo

CONTINENTAL OIL COMPANY

PRODUCTION DEPARTMENT

EUNICE, NEW MEXICO

IOCATION MAP
State 10, Hawk B-10 and Hawk B-3 Leases

Date: 4-5-1962 Scale: 1" = 2,000'
Drawn By: REC

BEFORE EXAMINER NUTTER CIL CONSERVATION COMMISSION EXHIBIT NO. CASE NO. 2697

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Proposed Marsa, Hardy Gross 57:501-63000 (Gross likewall) .

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Brown Oil Tool Nodel DS-9-2H Dual Facker set at 6190

Proposed Trial Porferations 6200° 6400° (Gross Interest.)

Sterne dilone out / a 6500° to Book to

- 2. Proposed Tubing Death (Tubb String) 2-17165 C.D. Tubing C 6350

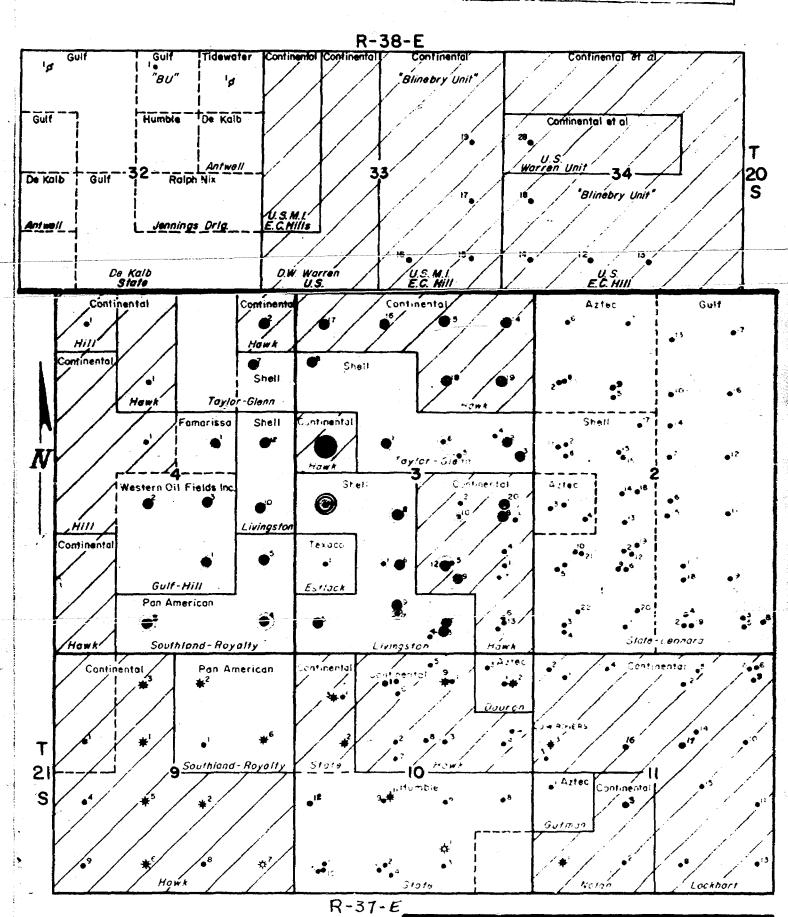
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BEFORE EXAMINER NUTTER
L. CONSERVATION COMMISSION
EXHIBIT NO. <b>1</b> CASE NO. <b>259</b>



Proposed Location Blinebry Oil O Tubb OilO Terry Blinebry O Blinebry Gas Tubb Gas () Brunson Hare Drinkard Wants Abo

### CONTINENTAL COMPANY

PRODUCTION DEPARTMENT

EUNICE, NEW MEXICO

LOCATION MAP State 10, Hawk B-10 and Hawk B-3 Leases

Scale: 1" = 2,000! Date: 4-5-1962 Drawn By:

DEARNLEY-MEIER REPORTING SERVICE, Inc.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 11, 1962

### EXAMINER HEARING

IN THE MATTER OF:

Application of Continental Oil Company for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Hawk B-3 Well No. 21, located in Unit L of Section 3, Township 21 South, Range 37 East, Lea County, New Mexico, as a triple completion (conventional) in the Blinebry, Tubb and Drinkard Pools, with the production of oil from all zones to be through parallel strings of 2 1/16 inch tubing.

CASE NO. 2597

BEFORE: Daniel S. Nutter, Examiner

### TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: Case 2597.

MR. MORRIS: Application of Continental Oil Company for a triple completion, Lea County, New Mexico.

MR. FOM: Robert Fox of Mellahan and Fox, appearing for Continental Oil Company. We have one witness to be sworn, Jerry Felts.

(Witness sworn).

(Whereupon Applicant's Exhibits 1 and 2 were marked for identification).

### JERRY FELTS

called as a witness, having been first duly sworn on oath, was



examined and testified as follows:

### DIRECT EXAMINATION

### BY MR. FOX:

- Will you state your name, please? Q
- A Jerry Otis Felts.
- Whore do you reside, Jerry?
- 1101 Seventh, Eunice, New Mexico.
- By whom are you employed? Q
- Continental Oil Company. Α
- What is your title? Q
- I am primarily classified as Production Engineer. A
- Have you testified before the Commission previously? Q
- No, sir, I have not. A
- What is your educational background? Q
- I received a BS degree in mechanical engineering, petro-A leum option, in '57 from Oklahoma State University.
  - Following your graduation, what has been your experience? Q
- I was employed by Continental Oil Company in '57 as an engineer trainee. I served as a trainee for the period of one year. I was promoted to associate engineer, and I have served in that position for one, year, and was then promoted to production engineer.
- With Continental Oil, what have been your duties during this term of employment?
  - I am directly under the supervision of the district



DEARNLEY-MEIER REPORTING SERVICE,

engineer, who has responsibility, I believe, for promotion of drilling wells and of remedial projects for oil and gas well promotion of various types, lease studies and pool studies, and I have done most of those and have assisted in some of them.

- Has this job been confined to the State of New Mexico?
- Yes, sir.
- And are you familiar with the area to which this application refers?
  - Yes, sir, I am.
- Are you familiar with the application in this case, which is for the approval of a triple completion on the Hawk B-3, Well Number 21, within the Blinebry, Tubb and Drinkard Pools, through parallel tubing, as I understand it, with strings of 2 1/16 inch measurement?
  - Yes, sir, I am familiar with it. A
- Now, will you examine Exhibit Number 1, Mr. Felts? What does Exhibit Number 1 depict?
- Exhibit Number 1 is a schematic diagram of a proposed Α well, depicting the cementing program, also the casing string program, packers and tubing string which will be employed in the well head.
- With the type of packers proposed, what is your opinion regarding whether permanent separation would be attained between the several producing zones?
  - These packers are presently used in wells within the area,



and it is my opinion that the permanent separation will be effective by the use of these packers.

Would you state a bit more specifically the cementing program for the well?

Yes, sir. A surface hole will be drilled at approximately 1400 feet, in which 9 and 5/8 inch casing will be run and cemented. The cement will be circulated to the surface, the well will then be drilled to total depth of approximately 6750 feet, at which time 7 inch o.d. casing will be run and cemented. It's proposed to run the cement to approximately 2400 feet.

Would a well of this type, in your opinion, protect the various producing zones which will be encountered here?

Yes, sir, it will.

Now, the applicant in this case states that you expect all three of the zones to flow initially. If it becomes necessary to lift artificially from one or more of the zones, could this be done with this proposed type of completion?

Yes, sir, it will be possible to produce these wells artificially by conventional producing methods with sucker rods and pump.

If leakage were to occur in this well, apart from the regular packer leakage along the seams, what other means would be available to detect leakage?

In all probability, the most recognizable, effective communication would be a rise or probably an increase in pressure



# DEARNLEY-MEIER REPORTING SERVICE,

on one or the other of the tubing strings. Also there would be; in all probability, a variance of gravity in the crude oil.

- This well has not been drilled at this date, is that right, is that correct?
  - That is correct. It has not been drilled yet.
  - Consequently, you have no log on this well?
  - No, sir, we do not.
- Will you take Exhibit Number 2, please? Are you acquainted with this exhibit?
  - Yes, sir, I am.
  - What does it show?
- Exhibit Number 2 is a location and ownership plat of the Hawk B-3 lease and the surrounding area, showing the wells in that area and the operators of the leases.
- According to the plat, the section within which this well is proposed is an odd section. I notice the branch shows 38N on the top and 37 on the bottom.
  - That is correct, that is an adjustment section.
  - An adjustment section, is it?
  - That's correct.
  - What type of land is the ownership?
  - Federal acreage.
- Have there been multiple completion wells in the area of the proposed well which has been brought up in this hearing?
  - Yes, sir, there have. There are several within the



immediate area.

What is the location from the boundaries of this proposed well?

The location of the subject well is 3300 feet from the north line, 660 feet from the west line of Section 3, Township 31 South, Range 37 East, NMPM, Lea County, New Mexico.

- What is the distance from the south line?
- From the south line?
- Yes, sir.
- I don't have that from the south. 3300 feet from the north line.

I think that is all I have. MR. FOX:

Are there any questions of Mr. Felts? MR. NUTTER:

MR. MORRIS: Yes.

Mr. Morris. MR. NUTTER:

### CROSS EXAMINATION

BY MR. MORRIS:

The well directly west of your proposed well, the Shell-Livingston Well Number 1, that is the same completion in the Blinebry That's correct. oil?

And the well immediately east of your proposed well, the Shell, Taylor-Glenn Well Number 1, is a dual completion in the Blinebry gas and Drinkard oil?

That's correct.

So, you have a Blinebry oil well on one side and a Blinebry gas well on the other side?

REPORTING SERVICE,

Yes, sir.

What geological information has led you to believe that you will get a Blinebry oil well on the proposed location rather than a gas well?

The Blinebry oil is arbitrarily divided up into numbers of division changes, particularly of the block. Starting at the top, Zones 1, 2, 3, and 4, it is the opinion that Zone 1 is gas productive, probably Zone 2 is gas productive, and the zones below that are oil productive.

In this particular well, what makes you believe that you are going to encounter oil in the zones lower than Zone 2?

Well, it's proposed to drill the well for principal strata into zones below number 2.

In other words, the Zones 1 and 2 may be present and may be productive of gas, but you are to perforate in no intervals?

That's correct.

MR. MORRIS: That is all I have. Thank you.

### CROSS EXAMINATION

### BY MR. NUTTER:

Mr. Felts, do you have anything available regarding the gravities to be expected in these zones?

Yes, sir, I do. The approximate gravity of the Drinkard oil zone is 38 degrees. The gravity of the Tubb oil zone varies from about 40 degrees gravity to as high as 50 degrees gravity. The Blinebry zone also varies from approximately 41 degrees to 50



DEARNLEY-MEIER

degrees API gravity.

- What about the GORs on the three zones?
- The GORs vary considerably in this area from well to well, depending on the zones of completion.
- Q Do you have an average gravity for the Drinkard in the area - - GOR, I am sorry?
- Initially the average GOR for the Drinkard would be approximately 800 to 1.
  - And what about bottom hole pressures, Mr. Felts?
- Yes. I have bottom hole pressures. From the Drinkard shut in bottom hole pressure is approximately 2400 pounds per square inch. The Tubb bottom hole pressure is approximately 1600 pounds per square inch. The Blinebry bottom hole pressure is approximately 1900 pounds PSI.
- Now, is this location within the defined recommendations of the Tubb gas pool and Blinebry oil or gas pool?
- No, sir. It's within the limit of the Tubb and Blinebry oil pool.
- Q So the pool rules regarding classification of wells, whether or not oil or gas, would apply?
  - Α Yes, sir. They do.
- Depending on the gravity and QORs encountered in these That's right. That's correct. wells?

MR. NUTTER: Are there any other questions of Mr. Felts?

RE-CROSS EXAMINATION



N. M.

### BY MR. MORRIS:

One further question. Mr. Felts, referring again to the Shell, Taylor-Glenn well number 1 directly east of the proposed location, are you aware of whether the Zones 3 and 4, the oil producing zones of the Blinebry formation were encountered in that particular we11?

A I am not too sure, but I believe they were encountered, but not perforated.

They show as being completed as a gas well for some Yes, sir. reason?

In your opinion, do you believe that there is a possibility that the subject well would be productive or would be disa gas well in the Blinebry?

If the lower zones below Zone 2 are perforated, I believe it would be an oil well.

I see. All right. Now, maybe I should have asked the question this way. Do you know if any of the zones below Zone 2 will not be present in this well?

No, sir. In all of the wells that are drilled in this area, all of the Blinebry zones are present.

Q Thank you.

MR. NUTTER: Are there any other questions of Mr. Felts? MR. FOX: May I offer Mr. Lyons as a witness in view of some of the questions concerning the Taylor-Glenn well?

NUTTER: Yes, sir



### V. T. LYON

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

### DIRECT EXAMINATION

### BY MR. FOX:

- State your name, please?
- V. T. Lyon.
- By whom are you employed?
- Continental Oil Company.
- And have you testified before the Commission or its examiners previously?
  - Yes, sir. I have.
- Mr. Lyon, will you look at the Exhibit that is marked Number 2 and directing your attention to the proposed well and the well shown as Shell, Taylor-Glenn Number 1, have you any knowledge as to the plans with respect to the Taylor Clenn welling the future as to its relationship to the proposed well before the hearing?

Yes, sir. I do. This Taylor-Glenn Number 1 is a gas well. It's in the Blinebry pool, 160 acres allocated approximately for Blinebry gas, which includes Lot 12 or the lease on which our proposed well is to be located. In view of gutureommunitization, Shell has agreed to delay the completion of this well as an oil well, which they do contemplate. They have informed us that as soon as our well is drilled and completed, they will recomplete



their well as a Blinebry oil well.

MR. FOX: That is all I wanted to bring out.

MR. NUTTER: Are there any further questions of Mr. Lyon? If not, you may be excused.

MR. FOX: I would like to offer at this time Exhibits 1 and 2.

MR. NUTTER: There being no objection, Exhibits 1 and 2 will be admitted in evidence.

> (Whereupon, Applicant's Exhibits 1 and 2 admitted in evidence)

MR. NUTTER: Is there anything further? Does anyone have anything to offer in case number 2597? We will take the case under advisement. I do hereby centify that the foregoing is

STATE OF NEW MEXICO ) COUNTY OF BERNALILLO)

., Examiner New Mexico Oil Conservation Commission

I, MICHAEL RICE, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached transcript of hearing was reported by me in stenotype and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

My Commission Expires: