

CASE 2984: Application of THE  
PURE OIL COMPANY & CONTINENTAL  
CARBON CO. to utilize natural gas.

Robertson 1st  
the 11th of Feb  
at 11:00 am on 1st  
for 11:00 am from the 11th

11th of Feb  
at 11:00 am on 1st  
for 11:00 am from the 11th

CASE No.

2984

Application,

Transcripts,

Small Exhibits

ETC.

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. 2984  
Order No. R-2655

APPLICATION OF THE PURE OIL COMPANY  
AND CONTINENTAL CARBON COMPANY TO  
UTILIZE NATURAL GAS IN A CARBON  
BLACK PLANT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 5, 1964, at Santa Fe, New Mexico, before Daniel S. Nutter, and at 9 o'clock a.m., on February 19, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 4th day of March, 1964, 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 applicants, The Pure Oil Company and Continental Carbon Company, seek an order authorizing the utilization of approximately 7 million cubic feet of gas per day in the Continental Carbon Company Carbon Black Plant near Eunice, New Mexico, said gas to be produced from The Pure Oil Company Wilson Deep Unit Well No. 1, completed in the Morrow zone of the Pennsylvanian formation and located in the SE/4 NW/4 of Section 13, Township 21 South, Range 34 East, NMPM, Lea County, New Mexico.

(3) That the aforesaid carbon black plant since its construction has been operating on casinghead gas gathered from numerous leases in the vicinity thereof.

(4) That all casinghead gas produced within the immediate vicinity of said carbon black plant's gathering system which can be connected economically to said system is being gathered; that Continental Carbon Company expressed the intent to continue to utilize all available casinghead gas in its plant as long as it is economically feasible to do so.

-2-

CASE No. 2984  
Order No. R-2655

(5) That the production decline curves for many of the leases to which the carbon black plant is connected indicate that the quantity of available gas will diminish sharply within the next few years, making another source of gas necessary if the plant is to continue in operation.

(6) That the burning of gas produced from the Morrow zone of the Pennsylvanian formation by The Pure Oil Company Wilson Deep Unit Well No. 1 for the manufacture of carbon black is a beneficial use of said gas and should be permitted.

IT IS THEREFORE ORDERED:

(1) That The Pure Oil Company is hereby authorized to produce and Continental Carbon Company is hereby authorized to utilize up to 7 million cubic feet of gas per day produced from the Morrow zone of the Pennsylvanian formation by The Pure Oil Company Wilson Deep Unit Well No. 1, located in the SE/4 NW/4 of Section 13, Township 21 South, Range 34 East, NMPM, Lea County, New Mexico, said gas to be used in the manufacture of superior reinforcing furnace black at Continental Carbon Company's SRF Plant near Eunice, New Mexico.

(2) That the applicant, Continental Carbon Company, shall continue to purchase casinghead gas from leases to which it is connected, or which from time to time may become available for connection, providing that the distance and quantity of gas involved make the gathering of such gas economic.

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

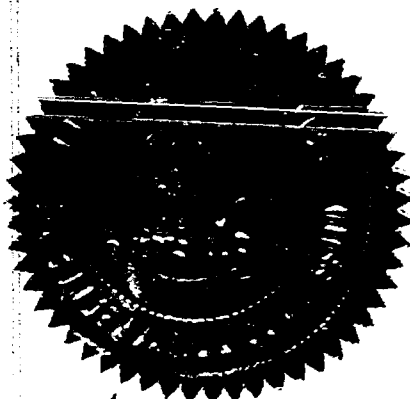
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Jack M. Campbell*  
JACK M. CAMPBELL, Chairman

*E. S. Walker*  
E. S. WALKER, Member

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



esr/

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

State of New Mexico  
**Oil Conservation Commission**



LAND COMMISSIONER  
C. E. JOHNNY WALKER  
MEMBER

P. O. BOX 871  
SANTA FE

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

March 4, 1964

Mr. Richard S. Morris  
Seth, Montgomery, Federici & Andrews  
P. O. Box 2307  
Santa Fe, New Mexico

Re:

Case No. 2984

Order No. R-2655

Applicant:

The Pure 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

ix/

Carbon copy of order also sent to:

Hobbs OCC \_\_\_\_\_

Artesia OCC \_\_\_\_\_

Astec OCC \_\_\_\_\_

OTHER \_\_\_\_\_

-2- Case 2980 continued from page 1

North, Range 13 West, and authorizing the drilling of a well for said unit at an unorthodox location 1625 feet from the South line and 1250 feet from the West line of said Section 15, Town of Farmington, San Juan County, New Mexico.

CASE 2981: Application of Gulf Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Northwest Eumont Unit Area comprising 2,760 acres, more or less, of State and fee lands in Township 19 South, Range 36 East, Lea County, New Mexico.

CASE 2982: Application of Gulf Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Eumont Gas Pool by the injection of water into the Queen formation through 15 wells in Sections 11, 14, 15, 22 and 23, Township 19 South, Range 36 East, Lea County, New Mexico.

CASE 2983: Application of The Pure Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Brinninstool Unit Area comprising 17,237 acres, more or less, of Federal and State lands in Townships 23 and 24 South, Ranges 32 and 33 East, Lea County, New Mexico.

CASE 2984: Application of The Pure Oil Company and Continental Carbon Company to utilize natural gas in a carbon black plant, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to utilize approximately 7 MCF of Devonian gas per day in the Continental Carbon Company carbon black plant near Eunice, New Mexico, said gas to be produced from The Pure Oil Company Wilson Deep Unit Well No. 1, located in the SE/4 NW/4 of Section 13, Township 21 South, Range 34 East, Lea County, New Mexico.

CASE 2985: Application of Shell Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Bootleg Ridge Unit Area comprising 10,818 acres, more or less, of State and Federal lands in Townships 22 and 23 South, Ranges 32 and 33 East, Lea County, New Mexico.

DOCKET: EXAMINER GEARING - WEDNESDAY - FEBRUARY 5, 1964

9:00 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, Alternate Examiner:

- CASE 2976: Application of Midland Production Corporation for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill its Hill & Meeker Phillips Cryer Well No. 34-2 located 2310 feet from the South and West lines of Section 34, Township 10 South, Range 36 East, to bottom in the Devonian formation 1980 feet from the North and West lines of said Section 34, Lea County, New Mexico.
- CASE 2977: Application of Cities Service Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Brunson C Well No. 4, located in Unit J of Section 3, Township 22 South, Range 37 East, Lea County, New Mexico, to produce oil from the Blinbry and Drinkard Oil Pools through parallel strings of 1 1/2 inch and 2 1/16 inch tubing, respectively.
- CASE 2978: Application of Union Oil Company of California for a waterflood expansion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its South Caprock Queen Unit Waterflood Project, Caprock Queen Pool, Chaves County, New Mexico, by the conversion of nine additional wells located in Sections 28, 29, and 33, Township 14 South, Range 31 East, and Sections 3 and 4, Township 15 South, Range 31 East, to water injection.
- CASE 2979: Application of Pan American Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation through its U. S. A. Malco Refineries 'G' Well No. 13, located 2302 feet from the South line and 1650 feet from the West line of Section 10, Township 18 South, Range 27 East, Empire Abo Pool, Eddy County, New Mexico.
- CASE 2980: Application of Pioneer Production Corporation for force-pooling and an unorthodox location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Basin-Dakota Pool underlying the W/2 of Section 15, Township 29

CASE 2986: Application of Shell Oil Company to establish a GOR limit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a special gas-oil ratio limitation of 5,000 cubic feet of gas for each barrel of oil produced in the Mesa-Queen Pool, Lea County, New Mexico.

CASE 2987: Application of Shell Oil Company for a waterflood project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot waterflood project in the South Bitter Lake-San Andres Pool, by the injection of water into the San Andres formation through three wells at unorthodox locations in Sections 27 and 34, Township 10 South, Range 25 East, Chaves County, New Mexico.

CASE 2480 (Reopened):

In the matter of Case No. 2480 being reopened pursuant to the provisions of Order No. R-2182-A which continued for a period of one year the temporary 80-acre proration units established by Order No. R-2182, Henshaw-Wolfcamp Pool, Eddy County, New Mexico. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.

CASE 2988: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit George E. Willett and all other interested parties to appear and show cause why the SDD Hare Well No. 7, located 600 feet from the South line and 1360 feet from the East line of Section 14, Township 29 North, Range 11 West, San Juan County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.



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

Case 2794

January 16, 1964

Seth, Montgomery, Federici & Andrews  
Attorneys at Law  
P. O. Box 828  
Santa Fe, New Mexico

DOCKET MAILED

Date 1-24-64

Attention: Mr. Richard S. Morris

Gentlemen:

We have your letter of January 13 and the Continental Carbon Company letter of January 6 concerning the proposed utilization of natural gas from Pure Oil Company's Wilson Deep Unit in Continental Carbon Company's carbon black plant at Eunice, New Mexico.

Since the Commission would prefer to consider this matter at a hearing, we have placed the case on the February 5, 1964, Examiner hearing docket. If this date is not satisfactory, please advise me at your earliest convenience.

Very truly yours,

J. M. DURRETT, Jr.  
Attorney

JMD/esr

cc: Continental Carbon Company  
P. O. Drawer 22085  
Houston 27, Texas

J. O. SETH (1883-1963)

A. K. MONTGOMERY  
WM. FEDERICI  
FRANK ANDREWS  
FRED C. HANNAHS  
GEORGE A. GRAHAM, JR.  
RICHARD S. MORRIS

**SETH, MONTGOMERY, FEDERICI & ANDREWS**

ATTORNEYS AND COUNSELORS AT LAW

301 DON GASPAR AVENUE  
SANTA FE, NEW MEXICO 87501

January 13, 1964

*Case 2984*

12  
POST OFFICE BOX 828  
AREA CODE 505  
TELEPHONE 983-7315

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

Attention: Mr. James M. Durrett, Jr.,  
General Counsel

Gentlemen:

Sometime last week I discussed with Mr. Jim Durrett the subject matter of the enclosed letter from Continental Carbon Company. As I pointed out to Mr. Durrett the matter seems to be within the provisions of Rule 404 of the Commission's Rules and Regulations and that no hearing should be required prior to utilizing the gas from the Wilson Deep Unit as proposed by Continental Carbon Company.

Even though a reading of Rule 404 would not seem to require a hearing in this case, both Continental Carbon Company and the Pure Oil Company wish to advise the Commission of their proposed action, and, if possible, secure a ruling by the Commission that no hearing and no official order of the Commission is necessary to authorize the proposed utilization of natural gas. Should the Commission desire to consider this matter at a hearing, both parties would be glad to make a formal presentation.

Due to the urgency facing the Continental Carbon Company in the acquisition of a new source of gas for its plant, we would appreciate a ruling by the Commission as soon as possible; if a hearing must be held, we request that it be set at an early date.

Very truly yours,

*Richard S. Morris*

RSM:po  
Enclosure

cc: Mr. Kenneth D. Hewitt  
Mr. J. R. Murphey, Jr.

DOCKET MAILED

Date 2-10-64  
*R*

# CONTINENTAL CARBON COMPANY

4848 GUITON, P. O. Drawer 22085, HOUSTON 27, TEXAS

Telephone  
MOhawk 6-1641



2987  
Cable Address  
"CONCARB"

January 6, 1964

Oil Conservation Commission  
State of New Mexico  
Santa Fe, New Mexico

Gentlemen:

As you are probably aware, we have entered into negotiations with the Pure Oil Company to obtain gas from their Wilson Deep Unit. The purpose of our obtaining this gas is to replenish the diminishing casing head gas which we are presently using for our carbon black plant at Eunice, New Mexico. We have explored exhaustively the possibility of obtaining additional casing head in or near our carbon black plant at Eunice and have found all available casing head has been committed to other users. Even should we be successful in finding small quantities of casing head from one or two wells, the cost of collecting these small quantities would be uneconomical.

We are not contemplating any enlargement or expansion of our carbon black plant. The gas from the Wilson Deep Unit would be used to replace the diminishing casing head quantities.

If permitted to do so by the Commission we will initially obtain from the Wilson Deep Unit approximately five million cubic feet per day for use in our carbon black plant, expanding to seven million cubic feet per day as the casing head presently being collected by our gathering system diminishes.

We would appreciate action on the above at the earliest possible date since we must lay a pipe to the Wilson Deep Unit well which will take some time and we cannot logically proceed with this until we have the Commission's approval to purchase this gas.

Yours very truly,

CONTINENTAL CARBON COMPANY

*Kenneth D. Hewitt*

Kenneth D. Hewitt  
Technical Assistant

KDH:ms

DOCKET MAILED

DOCKET MAILED

Date 1-24-64

Date 2-10-64

*JK*

Feb 5 Glamis

Case \_\_\_\_\_

Application of Pure Oil Co and  
Continental Carbon Co to utilize natural  
gas in a carbon black plant.

~~Applicants~~ in the above styled cause  
seek authority to utilize approximately  
7 MCF of Devonian gas per day from  
the Wilson Deep Unit well ~~number~~ No 1  
located in the SE/4 NW/4 of Sec 13  
T 21 S R 34 E Lea County, N.M.

in ~~the~~ the Continental Carbon Co carbon  
black plant near Eunice, New Mexico,

Dought  
to Rich

Morris

+  
1 copy to Hunt

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3871

ALBUQUERQUE, N. M.  
PHONE 243-6691

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
February 5, 1964

EXAMINER      HEARING

IN THE MATTER OF:

Application of The Pure Oil Company and  
Continental Carbon Company to utilize  
natural gas in a carbon black plant, Lea  
County, New Mexico.

Case No. 2984

BEFORE:      DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING



BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
February 5, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of the Pure Oil Company  
and Continental Carbon Company to  
utilize natural gas in a carbon black  
plant, Lea County, New Mexico.

CASE NO. 2984

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case 2984.

MR. DURRETT: Application of Pure Oil Company and  
Continental Carbon Company to utilize natural gas in a carbon  
black plant, Lea County, New Mexico.

MR. MORRIS: May the Examiner please, again I am Richard  
Morris of Seth, Montgomery, Federici & Andrews, of Santa Fe, New  
Mexico, appearing for the Pure Oil Company and for Continental  
Carbon Company in this case. I would like to make a brief comment  
at the outset of this case at an appropriate time.

MR. NUTTER: Please proceed.



MR. MORRIS: In the first instance, as the Examiner is aware, there are some inaccuracies in the advertisement of the case concerning the amount of gas that we intend to utilize, and also concerning the formation from which the gas is produced. Actually, to set the record straight, the proposal is to use approximately seven million feet of gas per day from the Wilson Deep unit, and the gas will come from the Morrow rather than the Devonian formation.

The present case was brought to the Commission sometime ago, in the hopes that we could merely inform the Commission what we intended to do and proceed without any hearing being necessary. Rule 404 of the Commission rules and regulations is the applicable rule governing this situation. It is entitled "Natural Gas Utilization." Actually, Sub Paragraph "A" of that rule is inapplicable, but I would like to read briefly Paragraphs "B" and "C", which I believe will govern the situation.

Paragraph "B" read, "Carbon black plants may utilize the natural gas only in those instances in which all casinghead gas and residue gas produced in the vicinity of or which may reasonably be reached from the carbon black plant is being used beneficially."

Paragraph "C", "Any carbon black plant hereinafter constructed or any existing carbon plant which enlarges or expands its facilities for the manufacture of carbon black may utilize natural gas in the manufacture of carbon black only after permission



is obtained. We will show by our witnesses today that there is no casinghead gas produced in the vicinity of the plant or which may reasonably be reached from the Continental Carbon plant, which is not being used beneficially. We will show that residue gas is unsuitable for our operations. We will also show that the gas that we request to use in the carbon black plant is not being used in connection with any enlargement or expansion of the present facilities.

We will have two witnesses in this case. Mr. Kenneth D. Hewitt, Technical Assistant of Continental Carbon Company from Houston, Texas, and Mr. John Murphy of Pure Oil Company also will testify.

MR. NUTTER: Before we get started on the case, Mr. Morris, I would like to make comments on this error in the advertisement. We realize that this says 7 MCF of Devonian gas per day, which should be seven million feet of Morrow gas per day. We will proceed with the hearing of this case at this time. The case has been readvertised correctly for hearing on February 19th, at which time the case will be reopened if it is the applicant's desire. The record made in the case today will be incorporated in the record of the reopening on February 19th.

MR. MORRIS: That procedure is fine.

MR. NUTTER: We will ask for appearances at the present time, and appearances at that other hearing. Are there appearances in this case? Proceed, Mr. Morris.





(Witnesses sworn)

KENNETH D. HEWITT,

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

DIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Hewitt, I have already introduced you but for the  
record, would you state your name and by whom you are employed and  
in what capacity?

A My name is Kenneth Davis Hewitt, I am employed by  
Continental Carbon Company as Technical Assistant to the Executive  
Vice President. My job there is procurement of feed stocks for all  
of our carbon black plants and to also work on acquisition and  
joint ventures.

Q It might be interesting to the Commission, Mr. Hewitt,  
to know how many plants you have and where they are located around  
the country?

A We have a plant at Ponca City, Oklahoma, one at Sunray,  
Texas, West Lake, Louisiana, Bakersfield, California and Eunice,  
New Mexico. We also have some foreign plants, one at Holland,  
France and Italy and in Japan.

Q Where is your plant located in New Mexico?

A It is located about halfway between Eunice, New Mexico  
and Hobbs, New Mexico.



Q What type of production or product do you produce at that plant?

A We make furnace blacks there. It is generally termed an SRF plant, which means a superior reinforcing furnace black used in the manufacture of automobile tires and mostly compounding into rubber and plastic formulations.

Q How long has your plant been in existence, Mr. Hewitt?

A I believe that the SRF plant went on stream in 1958.

Q So, that would be about six years?

A Yes.

Q Since the time this SRF plant began its operations, have you had a fairly steady requirement of gas to operate the plant?

A Yes, the requirement has been very constant to make furnace blacks. Just within the battery limits of the plant, it requires 6,500,000 cubic feet per day. And an additional million cubic feet are needed to operate the three Clark compressors in our gathering and treating system, and to operate utilities and heat and general usage of gas around the plant, making a total requirement of averaging out at 7,500,000 cubic feet per day, calendar day.

Q Up to this time, at least, Mr. Hewitt, and over the last six years, what has been the source of that gas?

A It has been all casinghead gas, which we have brought in through our gathering and treating system from wells immediately to the west and slightly to the south of our plant.



Q Do you have a plat showing the location of your gathering system in that area?

A Yes, I have prepared a plot of the gathering system showing the lines extending from the plant out into the field, and also, the location of the plant in relation to Township and Range.

The plant is over here in 37 East, Section Three. There is a 20 inch line that runs due west from the plant with two laterals coming off of it, 14 inch laterals extending on down to four inch, and whatever is required to go into these various leases. I think the plot is fairly self explanatory as to showing the size of the lines and the extent of the thing throughout. I might call attention at this time to this, there is an eight inch line extending directly south from our plant down to Skelly's gasoline plant No. 2, which provides an overflow capacity, whenever the casinghead gas exceeds our exact demands of the plant, this gas is sold to Continental Oil Company, who in turn sells it to Skelly's gasoline plant. Skelly Oil Company owns this eight inch line, but there is a working agreement between Continental Oil and Skelly whereby Continental Oil maintains the line between the two plants here.

Q Mr. Hewitt, referring to your 20 inch line that goes directly west from your plant some seven or eight miles, at the point in Section Four here where there is a bend in the line.

A Where the 14 inch lateral comes in there.

Q Yes. Will this be the point at which you will intend to



tie onto an additional pipeline to go to the Wilson Deep Unit?

A That's right.

Q We'll show that by a later exhibit?

A Yes.

Q But, this is the point at which you will tie on?

A That's correct.

Q At the present time, Mr. Hewitt, are you, through your gathering system here, do you have enough gas available to operate your plant?

A During the winter months, we have days when we must curtail operations at the plant. Other days, due to the fluctuations in delivery of casinghead from the field, we will have as much as a million or a million and a half cubic feet over our requirement, but it is a very erratic delivery at present.

Q Have you made any studies to see whether your present source of supply will be adequate for your future needs?

A Yes, I have made or we have made several studies of this thing, and have made a projected decline of the gas gathering and treating system as shown within this little brochure that I have prepared here. The decline of the gathering system, first of all, I obtained decline curves from Continental's gas department at Hobbs, New Mexico, and prepared a chart which is shown here directly within this brochure. We have watched this decline through our accounting department for a number of years, and projected it.



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

based on just decline year to year, month to month, of the system and have projected that decline. The projected decline on the part of Continental Oil is much more drastic than what our accounting department has projected. It shows without a doubt in both instances that sometime during 1964, we are going to have to obtain additional gas from some source. As near as I can estimate it, we are going to hit the point where we would have to curtail production every day sometime in July or August of this year.

Q And the picture becomes progressively worse from that point on?

A On the subsequent page, I have put this up in a little graph, bar graph type form, to show the decline of 1964 through 1974 of just this casinghead we are presently obtaining. Also, I have shown over here, taking each well or major well within this gathering system and showing it by number the decline during the same period.

MR. PORTER: May I ask a question here?

A Yes.

MR. PORTER: Does this chart, or is this chart based on the Continental Oil Company figures?

A That's right. Both charts here are based on Continental Oil Company's decline, not on the accounting department.

Q (By Mr. Morris) Is the decline in this gas that is available to you, from your present source, due to the natural decline of the wells, or are there other factors?



A Well, these decline curves or charts that I have made up are based on just what the expected natural decline of this field would be. However, Continental Oil Company is preparing to unitize or has already unitized the area up here in Sections 35, 36 of 37 East, Range 20. I think it is just to the north of the plant, involving our State KK-36, State A-36, and on down, B-6. I have been told by Continental Oil Company that will entail plugging four of our gas wells in preparation to waterflooding this area. I have been told by the gas department that the unitization has been completed, that the engineering studies have been completed and that the AFE has actually been granted to go ahead with this waterflooding operation, which is projected to happen sometime during 1964. This would further cause decline in our casinghead when this happens. Also, over here in the Meyer A-1, Lockhart A-18, all being unitized in preparation to waterflooding, although I have no way of knowing exactly when that is projected to be completed.

Q With this situation before you, Mr. Hewitt, have you made a diligent search for other gas, casinghead gas, in this area?

A Yes, we have made, over the past three years, a very diligent search for casinghead. Continental Oil Company, who owns 51 percent of our company, is, of course, very interested in this, and also, keeping us informed of any additional casinghead in this area. But, outside of finding a possibility of relinquishment on the lease on the part of some other user of this gas, we have not found any casinghead that was economically feasible to attach



onto our present gathering system.

Q Have you found any available casinghead gas, Mr. Hewitt, in the vicinity of your plant or which might reasonably be reached from the plant?

A There is- - I have received notice that there is one well about seven tenths of a mile from our 20 inch line presently being used by El Paso, that will possibly be relinquished by El Paso in the near future. However, this entire gas would only amount to 100 MCF per calendar day. It would be out intent to attach onto this, of course, when it becomes available and to pick up any other casinghead in this entire area, if it and when it is relinquished or become available to us.

Q Mr. Hewitt, if you should discover that in this area there might be some sources of casinghead gas available in the nature of 73 MCF per month or another source of 60 MCF per month or 50 MCF per month, would that be at all attractive to you?

A The cost of installing even a one inch line, to put in meters and to maintain those meters, would be prohibitive, for that small quantity of gas.

Q In view of there being no casinghead gas in substantial quantities available to you, what recourse did you have at that point?

A Well, the only other alternative we have would be to move the plant at the time that the field declines to the point where we can no longer operate the plant economically.



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

Q This is unless you could get permission to use natural gas?

A That's right, in this area.

Q What is your proposal, what would you propose; would you briefly outline the nature of your agreement with Pure Oil Company and what you propose to do?

A Our agreement with Pure Oil Company is to run a four inch line approximately nine miles from this furthest point on our 20 inch line, coming out of our treater plant, over to the Wilson Deep Unit Number One well, and to take from that well, starting out at five million cubic feet per calendar day; if and when Wilson drills additional wells in the unit, it would be our intent to expand that quantity up to seven million cubic feet per day.

Q Do you have a plat showing the proposed extension of your pipeline and the location of the Wilson Unit?

A Yes, I do.

Q We have marked that as Exhibit Number Two, Mr. Hewitt. Would you just state what that exhibit shows?

A It is an engineering drawing showing the proposed four inch line extending from the end of our 20 inch gathering line over to the Wilson Deep Unit Number One.

Q Your proposal now to take five million a day from the existing well, going up to sevenmillion a day if the additional wells are drilled in this unit area?

A That's right.





DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

PAGE 13

Q If approval is given to this proposal, Mr. Hewitt, what will happen to the gas that you are taking from your present source?

A We will continue to take it right along throughout the decline of this present field, clear on down.

Q You might have some time when taking your present source and also taking this additional five million you would be taking in excess of your actual requirements, would you not?

A That's right. The breater and gathering system is capable of taking up to 14,000,000 cubic feet per calendar day, and we have, as I say, the usage plant - - of the plant runs seven and a half. The eight inch line here going down to Skelly would be the overflow line during this period.

Q Will the gas that you take from the Wilson Deep Unit in any way be used in connection with an expansion or an enlargement of your existing facilities?

A No, sir, there is no plan to expand the unit, furnace black plant.

Q Mr. Hewitt, we have talked about your search for casing-head, we have talked now about your proposed use of natural gas, have you ever considered the use of residue gas?

A Yes, we have considered residue gas. In fact, we have tried residue gas in furnace plants, but the yield of carbon black from residue gas is so low that it cannot be used economically within the plant. Briefly, residue gas can be used in a channel



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

black plant very adequately because the yield on carbon black in a channel black plant runs about a pound and a half to a thousand cubic feet. In a furnace black plant, in order to run one economically, you have to have a yield of nine pounds to a thousand cubic feet, up to ten and a half, which is approximately maximum.

Q Residue gas would be- -

A Residue gas is, without going into a lot of technical details, too dry. There is not enough liquid or higher components in there to give you the yield of carbon black required.

Q If your proposal is approved by the Commission, when would you actually began taking this five million a day, Mr. Hewitt?

A It will take us approximately two and a half months to put this four inch line across. We are shooting for May 1st of 1964.

Q Do you have any further comments you would like to make concerning this case?

A I can't think if anything.

Q We have marked your brochure as Exhibit One. Was that exhibit prepared by you or under your direction?

A It was prepared by me and under my direction, yes.

Q And Exhibit Two was also prepared in your company?

A That's right.

Q All right.

MR. MORRIS: We offer Exhibits One and Two at this time, Mr. Examiner.

MR. NUTTER: Continental Carbon's Exhibits One and Two



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service  
Albuquerque, New Mexico  
Suite 1120 Simms Building  
Phone 243.6691

will be admitted in evidence.

MR. MORRIS: That is all I have from Mr. Hewitt.

\* \* \*

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

MR. DURRETT: Yes, sir, I have a question.

CROSS EXAMINATION

BY MR. DURRETT:

Q Mr. Hewitt, am I correct now that Pure operates the unit, the Deep Wilson Unit?

A Number One.

Q They are the operator of that unit; is that correct?

A That is correct.

MR. MORRIS: I might interrupt just a moment, Mr. Durrett. We have a Pure witness who is going to testify about their end of the operation, if you have any questions along those lines.

Q (By Mr. Durrett) Fine. You do have a tentative contract with Pure?

A That is right.

Q Now, concerning your testimony that there wasn't any other gas available in the vicinity of the well, or of your plant, excuse me, what did you consider is a vicinity, Mr. Hewitt? Is that this map and now, what additional area?

A It is in the vicinity of our gathering system and plant,



that is right.

Q Now, what would you consider as the vicinity, would that be five miles from your lines?

A I would define vicinity as being, if you offered me five million cubic feet of gas per day, I would say the vicinity would be any area within ten miles of our gathering system. If you offered me a hundred MCF per day, I would say, oh, a mile or less.

Q So, it would depend upon the volumes that were available at a given location?

A Yes.

Q Well, proceeding along that line, as to what you would consider reasonably accessible, you do have to go in and lay a line now to the well; is that correct?

A That is right.

Q Now, do you compute reasonably accessible on the basis of how long it would take, considering the quantity of gas available, to pay out the line, is that the way you compute it?

A Yes, pay out on the line is always considered.

Q What do you consider to be a reasonable time for pay out on a line? I am trying to get to the basis that you use for considering what is reasonably accessible. Do you have a rule of thumb that you go by?

A Pay out on the line such as we are contemplating to go over on the Wilson Deep Unit Number One is two years.

Q Two years over there. Well, now, if you had any given



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

quantity of gas offered to you at a distance, well, closer or further away, than the Wilson gas, would you consider it reasonably accessible if it took longer than two years to pay out the line?

A I think two years would be about maximum.

Q Then, that is your basis, that anything that takes longer than two years, you wouldn't be interested in, or wouldn't consider reasonable, at least?

A That's right. I am trying to think now what management would think here, too, but in my own estimation, as a chemical engineer, I would say about two years on the pay out on the line.

Q Do you have the approximate cost figures on laying this four inch line?

A \$75,000.00.

Q \$75,000.00. You figure that will pay out within two years?

A That's right.

Q All right, sir.

MR. DURRETT: Thank you. I think that is all I have.

\* \* \* \*

# CROSS EXAMINATION

BY MR. PORTER:

Q Mr. Hewitt, your chart here in your brochure reflects a rather drastic decline in production from 1964 to 1966, and much more drastic than any of the other points on this chart. You mentioned that in connection with waterflooding, there probably



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

would be four wells plugged that you are now producing in this plant?

A That's right.

Q Do you know whether that fact is reflected in this drastic decline?

A The waterflood is not reflected in these graphs at all.

Q You don't know what accounts for the drastic decline?

A This was taken right off the decline curves that Continental had prepared.

MR. PORTER: Thank you.

\* \* \* \*

# CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Hewitt, you mentioned that this plant was built in 1958. Now, is that the SRF plant, the furnace black plant?

A Yes, sir.

Q Prior to this, there was a plant there, wasn't there?

A Channel black plant. This has been dismantled and sold.

Q And the SRF plant, which you consider to be capable of making superior products was built in 1958?

A That's right.

Q What was the capacity that was designed into that plant when it was built?

A It is a one unit plant, either 15 or 20 - 15,000 to



20,000 tons a year.

Q What quantity of gas per day would that be the equivalent of?

A That is the 6,500,000 cubic feet per calendar day.

Q Right now with the six and a half million feet going into the plant, the plant is operating at capacity.

A That's right.

Q Well, now, if you are continuing to receive- - Well, the projection by your accounting department is 234,000 per day, and by Continental's estimate, it is 225,000 MCF per day, would this equal the total capacity of the plant if you continue to produce all this casinghead gas plus buying the initial five hundred thousand per day from the Pure well?

A I don't quite follow your question here.

Q Well, now, Continental's projection is that you have 225,000 MCF- - Correction, 7,500 MCF available per day.

A Yes.

Q And your plant and your extra usage for compressors and heating and so forth is equal to 7,500 per day.

A That's right.

Q So, where are you going to make your initial purchase of five million per day if capacity is six and a half million in the plant?

A Well, the actual use of the gas to make carbon black is seven million five hundred thousand per day. However, the treater



and gathering system is designed to handle 14,000,000 per day.

But, please understand that in taking casinghead, one day you are down here at six million, next day you are up at eight, and it fluctuates back and forth. Some days we have to actually curtail the plant right now, but the extra gas is going down that eight inch line to Skelly.

Q Do you contemplate buying- - Or you said the initial purchases from Pure would be five million a day?

A That's right.

Q Will you buy that five million a day every day regardless of the amount of casinghead gas that is available?

A That's right.

Q And divert the rest of it down to Skelly's Number Two plant?

A Anything over and above our own usage will go down that eight inch line to Skelly.

Q In other words, you have a firm commitment to buy five million a day from Pure?

A That is right.

Q Now, it is your intent to continue to produce or to purchase the casinghead gas from all of these wells long as they are economically feasible of producing gas into your lines?

A That's right. We will take the casinghead gas. We will also hook onto any additional casinghead that is available within, well, an economic range of our gathering system.





DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

Q Any new gas, of course, you would have to see a basis for the pay out on the installation of a line?

A That's right.

Q In your opinion, have these other lines been in existence long enough to obtain a payoff?

A Yes, the 20 inch line was put in during World War II sometime or other, and was used on the old channel black plant.'

Q So, you will be able to continue to buy casinghead from these leases until the point of operating cost of the line exceeds the benefits derived from operating the line?

A That is right. Well, we are committed to take gas from this until- - our contracts expire mainly in 1972.

Q For casinghead gas?

A On the casinghead gas and it is our intent to take gas as long as that contract is in existence, and if the field is still in operation, why, we would expect to renegotiate those contracts.

Q Are the locations of the compressors on this line such that these casinghead gas connections will be able to buck that 20 inch pressure after the big well goes on?

A Well, the pressure on the present gathering system is very low. What we are going to have to do is step the pressure down from the Wilson Deep Unit Number One.

Q So, it will come into the line at low pressure?

A That's right.

Q I see. Now these graphs and these charts of predicted



gas production commence in 1964. They are not an extrapolation of any previous gas production. Is there any way of knowing if this is a correct decline which has been evidenced by former performance?

A I brought the decline curves with me.

Q Prior to 1964?

A Yes, sir. These decline curves were prepared by Continental Oil Company. I hate to introduce them as evidence because they are the only ones I have of this. These are projected here from 1956 through 1975, all projections, so that they are actual curves which have been established.

Q Are they on the individual leases that you have tabulated here on the last page of your brochure?

A Yes, individual wells.

Q Mr. Hewitt, we are going to have a month or a couple of weeks, anyway, before we can enter an order in this case. Could you furnish us with copies of those decline curves?

A Yes, I will have to have them taken back and get them photostated.

Q That would be fine, if you can make copies of them and furnish them to us. Mr. Hewitt, you stated that Continental Carbon Company is 51 percent owned by Continental Oil Company. So, I am sure that Continental Oil Company is interested in seeing this gas that is on these oil leases produced and sold. They are probably also interested in the price here as well as the price over at the Wilson Deep Unit. Could you tell us what the contract gas price



from the Wilson Deep Unit is?

A 12 cents.

Q Per MCF?

A Yes.

Q Will the gas be passed through a separator over on the Wilson Deep Unit lease?

A Yes.

Q And whatever liquid can be removed by normal separation will be removed?

A That is right.

Q How wet will the gas be when it gets into your 20 inch line down there, do you know; have any tests been made on it?

A The projection is that it will be between 1080 and 1100 on BTU basis, and will be somewhat wet. For us to get gas which is too saturated and full of very heavy oil material entails blowing the drifts and a lot of maintenance on our gathering lines as is in existence today on this gathering system which is taking casing-head gas. So, this is about the right degree of wetness for good operations of a SRF plant.

Q In other words, some of this casinghead gas is a little too wet for your use right now?

A That's right.

Q You have trouble keeping the drifts free?

A That's right.

Q In the 12 cents, are the liquids included in that 12 cents;



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

is there any premium paid above 12 cents?

A Whatever goes into our four inch line is ours.

Q Liquid and all?

A Yes.

Q Does anyone else have any questions of Mr. Hewitt?

MR. MORRIS: I have just one more question, Mr. Examiner.

REDIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Hewitt, if I am not mistaken, Mr. Murphy's testimony will show that the only casinghead gas in the overall area of your plant or gathering system, there are three sources of casinghead gas which are not being put to any beneficial use, but are in very small amounts, the largest single source being 73 MCF per month, and I believe that it would be located within two miles of your plant, would that amount of gas be attractive to you regardless of its proximity to your plant?

A Without even putting it down on the paper, or working it out on a feasibility study, it is readily apparent that you couldn't run a line two miles to pick up 73 MCF of gas per month, just would never pay out.

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

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

He may be excused.



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

JOHN R. MURPHY,

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

DIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Murphy, would you state your name and by whom you  
are employed and in what capacity?

A John R. Murphy, Jr., District Petroleum Engineer, Pure  
Oil Company, Midland, Texas.

Q You have previously testified before the Commission or  
one of its Examiner, have you not, Mr. Murphy?

A Yes.

Q Are you familiar with Pure's end of the application in  
this case?

A I am.

Q Have you been active in the negotiations with Continental  
Carbon Company concerning this sale of gas to them?

A I have furnished technical advice to our gas contract  
personnel in this matter.

Q Now, Pure Oil Company is an operator of the Wilson Deep  
Unit; is that correct?

A That's correct.

Q What is the status of development in that unit at this  
time?



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

A There is presently one well completed in the unit. It is completed in the Pennsylvanian-Morrow, at a depth of approximately 12,320 to 344. This well is located in Section 13 of Township 21 South, Range 34 East.

Q Has there been any production from this one well to the present time?

A The only production that has come from this well has been on the potential test.

Q Now, did you hear Mr. Hewitt's testimony as he just testified in this case?

A I did.

Q Was his statement of the proposal correct, in that you propose to sell to Continental Carbon Company five million cubic feet of gas per day from this one well, plus an additional two million if you drill any more wells?

A That's correct.

Q Do you plan to drill any more wells in this unit?

A It is contingent upon the successful performance of that well whether we will continue development.

Q At the present time, you don't have a definite plan to drill another well?

A We are in the process of formulating a plan of development to be filed with the State on this well at this time.

Q Now, you have other partners in your Wilson Deep Unit, do you not?



A We do. There are six owners in the unit, or working interest owners, rather.

Q Have you consulted your partners in agreeing to this proposal to sell gas to Continental Carbon?

A We have and of the six operators, four representing 72.58 percent of it have executed contracts with Continental Carbon. One with 12.94 percent has agreed to sign, but as yet, has not delivered an executed contract. One operator with 14.98 percent has indicated they will take their portion of the production in kind.

Q Now, does this well, this one well that you have in the unit now, have a sufficient potential to produce the five million feet of gas per day for Continental Carbon, plus the proportionate share in kind to this 14 percent working interest owner?

A It does. The well has a potential in excess of 20 million, and on our potential test, we flowed at a stabilized rate of 7.75 million with a surface pressure of 4350.

Q In order to deliver the five million to Continental Carbon, how much will you have to produce per day, total, in order to also satisfy your other working interest owner in kind?

A This would require a daily production of approximately 5.9 million.

Q You feel that the well can do this?

A I feel that this well is or has demonstrated its capability to deliver this rate for an extended period of time.

Q At this rate, how long a life do you believe this well will



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

have, on existing data?

A At the 5.9 million rate, the well will be able to deliver approximately 21 months, utilizing a thousand pound surface separation equipment pressure. If we drop the separation pressure lower than this, then, we can extend this life out to four years.

Q Now, this projection is, of course, based on current data subject to some change?

A Right. This projection is based on our present visualization of what the reservoir is with a single penetration. Also, the data we obtained from the four point test on potential. We are making this extrapolation on the basis of eight billion reserve at a thousand pound separator condition, or a  $11\frac{1}{2}$  billion reserve utilizing the 100 pound surface separator condition.

Q Do you have content analyses available on this gas?

A We have calculated out, and we have a content analysis that was taken during the potential test of the well, which exhibited the following characteristics: 92.46 Mole percent Methane, 4.6 percent Ethane, 1.39 percent propane, .53 Mole percent of our Butanes, .46 percent of C-5's plus; we are anticipating installing a coal separator or coal separation equipment upon this well, and will extract all of the C-5's plus and half of the Butanes and this will leave us a resultant gas stream of  $93\frac{1}{2}$  percent Methane, 4.58 percent Ethane, 1.04 percent Propane, .26 percent Butane, .57 CO2's and nitrogen. All those are expressed in Mole percents.

Q Now, the condensates that you obtain by separation





will remain your property; is that right?

A That's correct. This well stream has approximately 17 barrels per million of free liquids which is prior to separation, and the coal separator should add another  $4\frac{1}{2}$  which will give us a stabilized stock tank liquid API gravity of less than 60.

Q Mr. Murphy, in preparation for this hearing today, has Pure Oil Company made an investigation in the area of the Continental Carbon Company plant and gathering facilities to determine whether there is any casinghead gas available in that vicinity, or which might reasonably be reached from the carbon black plant, or its pipeline?

A This we did. We are not aware, of course, of Continental Carbon's economics, but in order to satisfy ourselves that there was no casinghead available which this gas would displace, we made a search of the present line and the proposed line, looking two miles on each side of the line. We went to the New Mexico Engineering Committee Production report and searched for the gas utilization on each of the leases listed in the field, which these lines cut across, and our findings were that there were three leases within this area that were venting gas and in each case, the daily gas venting was less than two and half MCF.

Q What were the actual figures on the three leases?

A There were 73 MCF on one.

Q Per month?

A Per month. 60 MCF per month on another, and 50 MCF on the



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

third.

MR. NUTTER: That was within two miles of the trunk line?

A Yes, sir. And the extensions.

Q (By Mr. Morris) Does your company consider this proposal advantageous from an economic standpoint and also from the standpoint of being able to just find a market for its gas?

A We felt that this was the most advantageous sale that we could have. This well is located on State property, and this five million a day rate is going to greatly exceed the revenue that we could have obtained under any other possible sale.

Q Do you have anything further you would like to add?

A No, sir, I believe that concludes my testimony.

MR. MORRIS: That is all we have from Mr. Murphy.

\* \* \* \*

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

MR. DURRETT: Yes, sir.

# CROSS EXAMINATION

BY MR. DURRETT:

Q Mr. Murphy, what is the closest pipeline to your Wilson Deep Unit?

A What variety, sir? There are several.

Q Any pipeline that could possibly take gas?

A We are located approximately 330 off of the El Paso main line, high pressure main, but they are not interested in this gas.



Q You have negotiated with them?

A Our gas contract- - I am speaking now not of my personal knowledge, but of secondhand, and our gas contract people have contacted El Paso, and they are not interested in this gas. Phillips Petroleum has a low pressure gathering system approximately a mile south of this point. We have negotiated with them and they had made an offer for this gas, however, it was not as economically attractive either on a current income basis or we felt on the long term basis, as the sale to the carbon black plant.

Q To go a little further into the hearsay testimony, do you have any knowledge concerning, or do you have any knowledge, or have you been informed as to what the price was that Phillips offered?

A This is getting definitely into hearsay now, because I was on vacation when all this happened, but my understanding was that they did offer  $13\frac{1}{2}$  cents for the gross stream. They are the operator that is going to take their portion in kind. Their maximum take was going to be around  $2\frac{1}{2}$  a day, two and half million a day.

Q Do you have any idea of when your company would feel that there might be a possibility of getting a pipeline connection into this Wilson Deep Unit?

A No, sir, I don't. And from my discussion with our contract people, their feeling was that it was an extremely good sale for several reasons. It was an intrastate sale, so we had no



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

FPC problems, and we did if we sold to Phillips. Any other sales that we would make, other than this, would be an interstate sale.

Q Just one other question. What does the operator that proposes to take in kind plan to do with his gas?

A This is Phillips Petroleum. They are planning to take it into the low pressure gathering system which goes into their own plant.

Q Which sounds reasonable.

MR. DURRETT: Thank you.

\* \* \*

# CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Murphy, what was the reason that El Paso was not interested in this purchase of gas?

A My assumption on this, as I have no personal knowledge, is that they don't have an outlet for this additional gas. It would require moving some place other to enter their line, other than at this location since this is on their main line, one of their transmission lines. So, they would have to take it to another point to get it into the line.

Q Would either have to be dried up more than it would be coming off the lease, or else compressed to get into the line?

A Either pressure would be sufficient to get into their line, but this- - I don't believe that they inject into this



main transmission line along the line itself. They put them in at certain terminal points.

Q What is their nearest high pressure gathering line?

A I don't know, sir.

Q Now, you estimate that with a thousand pound separator abandonment pressure you would have eight billion reserve here?

A Yes, sir.

Q Taking it down to the hundred pound, you would have 11 what?

A  $11\frac{1}{2}$  billion.

Q  $11\frac{1}{2}$ . You mentioned also that you were formulating a plan of development for the unit. Is it the intent to drill any more wells to the Morrow formation on the unit?

A I am not really sure, sir, that I am qualified to answer that right now, in that this plan will be formulated by several people in our office and the only thing I could do would be express a personal opinion here that if we see satisfactory performance from this well then, we will definitely want to exploit it.

Q Are you acquainted with the structure here, what was anticipated when you had the unit agreement?

A Yes, sir. At this time we drilled initially a Devonian test and the Devonian was water bearing and this is apparently extremely difficult for seismic operations, and we have had several reviews and additional shooting in the area, and there seems to be a pretty severe disagreement among some of our people even yet as



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

to what the structure looks like.

Q That would be the Devonian as well as the Morrow?

A Yes, sir. We assume that the Morrow is patterned after the Devonian.

Q For that reason you haven't come to any definite conclusion as to whether another well will be drilled or where it will be drilled?

A I would say we would anticipate drilling another one within the planned year, and if performance doesn't indicate we shouldn't, but as I say, I am only a partial voice in this formulation of this plan.

Q Well, now, right now your estimate of reserves is just based on the information you received from your four point test?

A That and our visualized geological picture.

Q And the structure, as you think it exists?

A Yes, sir.

MR. NUTTER: I see. Any other questions of Mr. Murphy? He may be excused. Do you have anything further, Mr. Morris?

MR. MORRIS: No, sir, I don't.

MR. NUTTER: Does anyone have anything they wish to offer in Case 2984? Mr. Kastler.

MR. KASTLER: Bill Kastler representing Gulf Oil Corporation. Gulf concurs in this application and urges its approval.

MR. NUTTER: Thank you. Anyone else? We will take this case under advisement.



DEARNLEY, MEIER, WILKINS and CROWNOVER

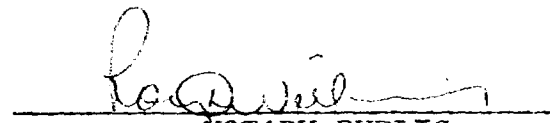
General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

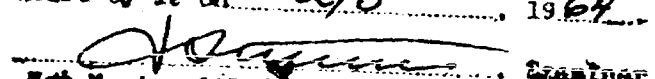
STATE OF NEW MEXICO  
COUNTY OF BERNALILLO

I, ROY D. WILKINS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal of Office this 12th day of February, 1964.

  
NOTARY PUBLIC

My Commission Expires:  
September 6, 1967.

I hereby certify that the foregoing is a true and correct record of the proceedings in the Ex parte hearing of Case No. 2984 heard by me on 2/5, 1964.  
  
Examiner  
New Mexico Oil Conservation Commission



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6691

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
February 19, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of Pure Oil Company and  
Continental Carbon company to utilize  
natural gas in a carbon black plant, Lea  
County, New Mexico.

Case No. 2984

BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING





DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
February 19, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of The Pure Oil  
Company and Continental Carbon  
Company to utilize natural gas in  
a carbon black plant, Lea County,  
New Mexico.

CASE NO. 2984

BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING

MR. UTZ: 2984 is a very short case, and will be taken first.

MR. DURRETT: Application of The Pure Oil Company and Continental Carbon Company to utilize natural gas in a carbon black plant, Lea County, New Mexico.

MR. MORRIS: May the Examiner please, I am Richard Morris of Seth, Montgomery, Federici and Andrews, Santa Fe, appearing for the applicant in this case. This case originally was advertised for the hearing before Examiner Nutter on February 5th, 1964, and the case was heard at that time. Due to an error in the advertisement and the notice given in this case, it has been



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

PAGE 3

readvertised and at this time I move the Examiner to incorporate in the present hearing of this case the entire record as presented to Examiner Nutter on February 5th.

MR. UTZ: Is there objection to Counsel's motion? The entire record of the case as heard by Examiner Nutter will be made a part of the record of this case.

MR. MORRIS: I might add, Mr. Examiner, the Continental Carbon Company is standing by waiting to lay a pipeline if the Commission sees fit to approve this application, and if the Examiner sees fit to recommend approval and the Commission sees fit to approve it, we would ask for an order as soon as convenient.

MR. UTZ: We will give it early consideration.

\* \* \* \* \*

STATE OF NEW MEXICO    §

COUNTY OF BERNALILLO   §

I, ROY D. WILKINS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill, and ability.

WITNESS my hand and Seal of Office, this 24th day of February, 1964.

I do hereby certify that the foregoing is  
MY COMMISSION EXPIRES September 6, 1967  
the Examiner of the New Mexico Oil Conservation Commission  
heard by me on February 19, 1964.  
Roy D. Wilkins, Examiner  
New Mexico Oil Conservation Commission



- I. Plot Plan - Diagram of Gathering System
- II. Projected Decline of the Eunice Gas Field
- III. General Statement Regarding Lack of Additional Casinghead Gas in the Eunice, New Mexico Area

BEFORE EXAMINER KUTTER  
OIL CONSERVATION COMMISSION  
applied - EXHIBIT NO. 1  
CASE NO. 2984

PROJECTED DECLINE OF THE EUNICE GAS GATHERING & TREATING SYSTEM

Projected decline curves, furnished by Continental Oil Company, on production from wells connected to the Eunice Gas Gathering and Treating System indicate that by 1965 insufficient volumes will be available for operation of the Eunice SRF Plant. Prior to receipt of these curves, the Accounting Department of our own Company had estimated the field decline for economic purposes. A comparison of the two projections is as follows:

Year	M C F					
	Continental Oil Co.			Accounting Department		
	Annual	Monthly	Daily	Annual	Monthly	Daily
1964	2,704,680	225,390	7,513	2,815,866	234,655	7,822
1965				2,534,180	211,181	7,039
1966	1,742,592	145,216	4,841	2,280,926	190,077	6,390
1967				2,052,662	171,055	5,701
1968	1,376,028	114,669	3,822	1,847,378	153,948	5,131
1969				1,662,672	138,556	4,618

As you can see from the foregoing and the attached charts on the predicted gas production from the Eunice area from our present wells, our requirement for gas to operate the Eunice Plant will not be met sometime during 1965. Our usage at the Eunice Plant for actual production of carbon black amounts to 6,500,000 cubic feet per day; however, to operate the compressors for uses in heating and other auxiliary uses in the Plant, an additional million cubic feet per day are required, making a total demand of 7,500,000 cubic feet per day.

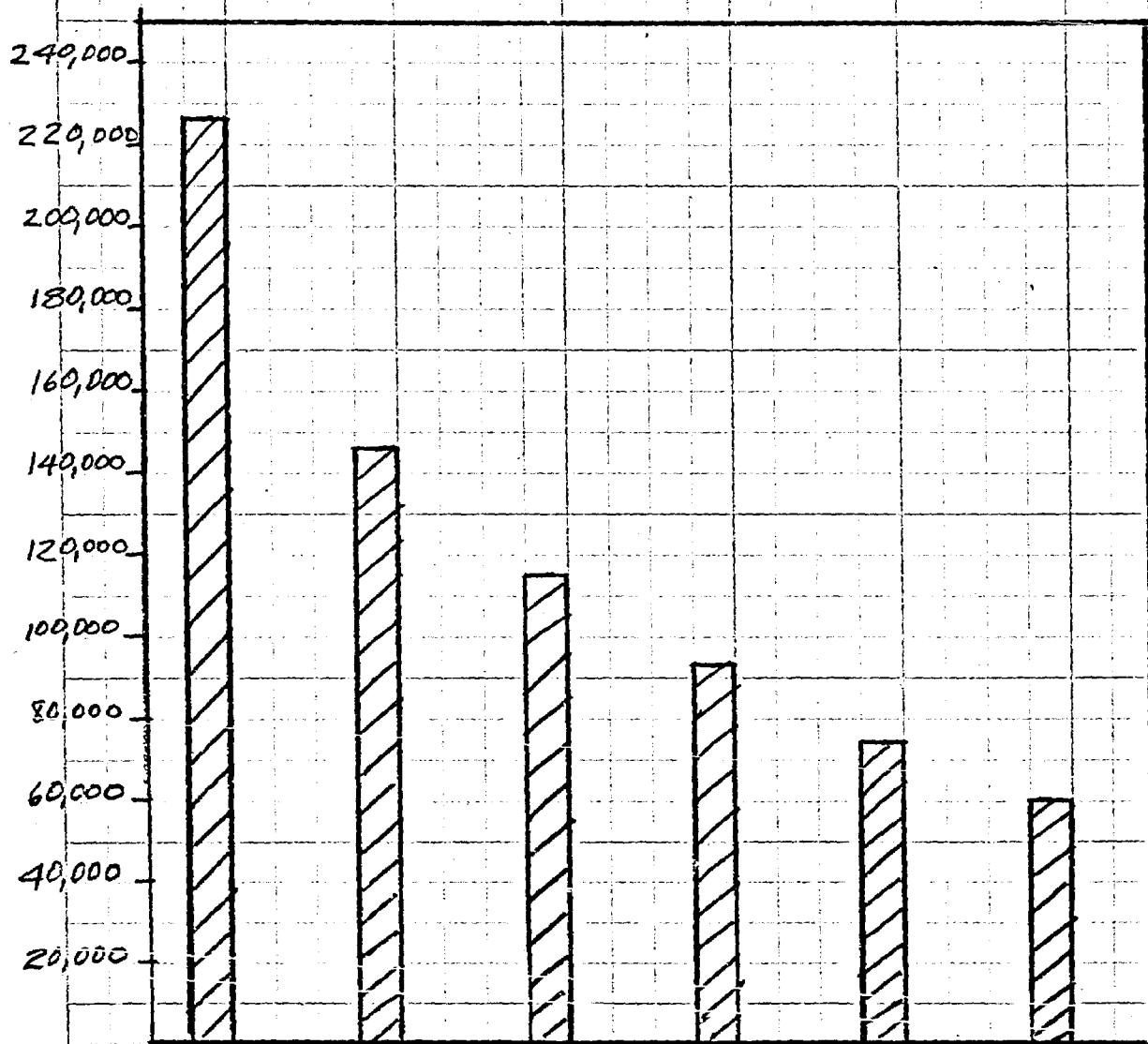
The compressor and treating plant is capable of handling 13 to 14 million cubic feet per calendar day; therefore, we have sufficient capacity within that unit to handle the additional volume of 5,000,000 cubic feet initially, on up to 7,000,000 later on, which we would obtain from Pure Oil Company. It would be our intent to continue to use the casing head gas on the present gathering system until such time as this gas completely disappeared either through complete decline or due to the fact that the oil companies operating this field chose to unitize the field and water flood same for the purpose of added production of oil.

KDH:ms  
1-31-64

Attachments

PREDICTED GAS PRODUCTION  
FROM EUNICE AREA WITH PRESENT WELLS

MCF GAS/MONTH



1964 1966 1968 1970 1972 1974

YEAR

BY R.E. DATE 11-11- SUBJECT \_\_\_\_\_  
 CHKD. BY \_\_\_\_\_ DATE \_\_\_\_\_

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
 JOB NO. \_\_\_\_\_

# TABULATION OF PROJECTED GAS PRODUCTION (EUNICE WELLS) MCF/MONTH

WELL	#	1964	1966	1968	1970	1972	1974
MEYER B-8	1	7,300	5,400	3,600	2,500	1,500	1,200
STATE C-20	2	150	76	39	21	11	7
MEYER B-17	3	240	190	150	120	100	70
" B-9	4	7,500	5,300	4,200	3,000	2,300	1,600
STATE D-15	5	17,000	13,000	10,000	7,000	5,200	3,900
MEYER A-17	6	2,100	1,700	1,400	1,200	1,000	840
STATE D-11	7	11,000	8,600	7,000	5,700	4,700	3,800
MEYER A-18	8	1,200	1,200	1,100	1,100	1,000	1,000
" A-8	9	1,800	1,000	620	360	210	120
LOCKHART A-30	10	54,000	46,000	40,000	35,000	30,000	26,000
" B-28	11	17,000	13,000	10,000	7,500	5,800	4,400
MEYER B-18	12	3,800	2,800	2,100	1,600	1,200	900
STATE C-20	13	1,500	1,100	800	590	430	310
" A-36	14	45,000	2,500	1,500	900	500	290
MEYER B-3	15	1,000	450	160	65	27	11
LOCKHART A-18	16	36,000	28,000	21,000	16,000	12,000	9,500
" B-13	17	3,800	1,900	1,000	500	250	130
" B-14	18	15,000	13,000	10,000	9,000	7,600	6,400
MEYER B-4							
TOTALS		225,390	145,216	114,669	92,156	73,828	60,478

LACK OF ADDITIONAL CASING HEAD GAS IN THE  
EUNICE, NEW MEXICO AREA

We have maintained contact with all oil companies and gas producers in the Eunice - Hobbs area of Lea County, hoping that an existing casing-head gas well would be found that could be attached to our present gathering system. We have found:

1. All wells that we have investigated have been committed on a long term basis to various other users.
2. Property on which future wells might be drilled has been previously committed to others.
3. Operating companies are unitizing sections of the area in preparation to water flood, which would further decrease the amount of casinghead gas available to our gathering system.
4. From the foregoing charts showing the rate of decline of the casinghead from our present gas wells, it is very apparent that we will require additional gas almost immediately.
5. Small quantities of casinghead might become available at considerable distance from our present gathering system; however, the cost of connecting to our system would be prohibitive. If a long pipeline is involved, then sufficient quantities of gas must be present to justify the capital outlay.

KDH:ms  
1-31-64

DRAFT

DSN/esr

February 28, 1964

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. 2984

Order No. R- 2655

APPLICATION OF THE PURE OIL COMPANY  
AND CONTINENTAL CARBON COMPANY TO  
UTILIZE NATURAL GAS IN A CARBON  
BLACK PLANT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 5, 1964, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this        day of March, 1964, the Commission, a quorum being present, having considered the ~~application and~~ testimony, the record, ~~and evidence produced~~, 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 applicants, The Pure Oil Company and Continental Carbon Company, seek an order authorizing the utilization of approximately 7 million cubic feet of gas per day in the Continental Carbon Company Carbon Black Plant near Eunice, New Mexico, said gas to be produced from The Pure Oil Company Wilson Deep Unit Well No. 1, completed in the Morrow zone of the Pennsylvanian formation and located in the SE/4 NW/4 of Section 13, Township 21 South, Range 34 East, NMPM, Lea County, New Mexico.

(3) That the aforesaid ~~Carbon Black~~ plant since its construction has been operating on casinghead gas gathered from numerous leases in the vicinity thereof.



(4) That all casinghead gas produced within the immediate vicinity of said ~~Carbon Black Plant~~'s gathering system which can be connected economically to said system is being gathered; that ~~it is the intent of~~ Continental Carbon Company <sup>expressed the intent</sup> to continue to utilize all available casinghead gas in its plant as long as it is economically feasible to do so.

(5) That the production decline curves for many of the leases to which the ~~Carbon Black Plant~~ is connected indicate that the quantity of available gas will diminish sharply within the next few years, making another source of gas necessary if the plant is to continue in operation.

(6) That the burning of gas produced from the Morrow zone of the Pennsylvanian formation by The Pure Oil Company Wilson Deep Unit Well No. 1 for the manufacture of carbon black is a beneficial use of said gas and should be permitted.

IT IS THEREFORE ORDERED:

(1) That ~~the applicants~~, The Pure Oil Company ~~and is~~ Continental Carbon Company ~~are hereby authorized to produce and~~ <sup>Continental Carbon Company is hereby authorized to</sup> and utilize up to 1 million cubic feet of gas per day produced from the Morrow zone of the Pennsylvanian formation by The Pure Oil Company Wilson Deep Unit Well No. 1, located in the SE/4 NW/4 of Section 13, Township 21 South, Range 34 East, NMPM, Lea County, New Mexico, said gas to be used in the manufacture of superior reinforcing furnace black at Continental Carbon Company's SRF Plant near Eunice, New Mexico.

(2) That the applicant, Continental Carbon Company, shall continue to purchase casinghead gas from leases to which it is connected, or which from time to time may become available for connection, providing that the distance and quantity of gas involved make the gathering of such gas economic.

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

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