## **GRAYBURG OIL COMPANY**

#### OF NEW MEXICO

811 WEST SEVENTH STREET

# LOS ANGELES

14

NEW MEXICO FIELD OFFICE P. O. BOX NO. 416 LOCO HILLS, NEW MEXICO

January 15, 1948



Mr. R. R. Spurrier, Director New Mexico vil Conservation Commission Santa Fe, New Mexico

Dear Sir:

Enclosed herewith is copy for your records of Flan of Operation for the Grayburg Zone under Grayburg Cooperative and Unit Agreement, Eddy County, New Mexico, covering the regiod January 1, 1948, through December 31, 1948.

Very truly yours,

Grayburg Oil Company of Mew Mexico

Vice President

3JH/nEncl/1

## AMENDMENT TO UNIGINAL PLAN OF OFERATION FOR THE URAYBURG LONE UNDER GRAYBURG GOOPERATIVE AND UNIT AGREEMENT EDBY COUNTY, NEW MEXICO COVERING THE FUNIOR JANUARY 1, 1948, THROUGH DECEMBER 31, 1948.

To Supervisor, United States Geological Survey Roswell, New Mexico

It is intended by Grayburg Unit Association, the Unit Operator designated in Grayburg Cooperative and Unit Agreement in Eddy County, New Mexico, that the Flan of Operation for the Grayburg Zone under Grayburg Cooperative and Unit Agreement originally approved by the Oll and Gas Supervisor April 6, 1944, shall remain in effect for the period January 1, 1948, through December 31, 1948, except for modifications and amondments contained herein.

1. Development to Date: Since October 1, 1946, wells completed in the Grayburg Zone (Upper San Andres formation) within the Unit Area consist of the following: one well on the Grayburg oil Company of New Mexico Burch "B" Lease, Burch No. 13-8 NW SB SW Section 19, Township 17 South, Range 30 East; one well on the Grayburg oil Company of New Mexico Keely "A" Lease, Keely No. 11-A, UN NA SE Section 24, Township 17 South, Range 29 East; one well on the Grayburg Oil Company of New Mexico Keely "S" Lease, Keely No. 13-8 NW Corner of NW SE NE Section 26, Township 17 South, Range 29 East; and two wells on the Western Fred. Company, Inc. Keely "C" Lease, Keely 20-C, C NE SE Section 25, Township 17 South, Range 29 East. As of December 31, 1947, there was one well drilling on the Western Froduction Company. Inc. Keely "C" Lease, Keely 27-C SW NW NW Section 26, Township 17 South, Range 29 East.

## 2. Flan of Development - Grayburg Zone:

- (a) Well Spacing: No change.
- (b) Casing Program: No change.
- (c) Proposed wells: The Unit Operator proposes to commence the drilling of two wells during the period covered by this Amendment and to diligently drill same to completion. Said wells are to be located as follows: Grayburg Cil Company of New Mexico Burch 15-A C SE UN Section 18, Township 17 South, Range 30 East; Grayburg Cil Company of New Mexico Keely 12-A C NW NW Section 24, Township 17 South, Range 29 East.

The Unit Operator also proposes to plug back and complete in the Grayburg Lone the deep test drilled as the Grayburg will Company of new Mexico Keely No. 10-A.

## (d) Operation of depressuring Project:

(1) Injection wells: wells in use for the injection of gas on Secember 31, 1947, were as follows: Grayburg will Company of New Mexico Burch No. 8-A, we Me No Section 19, Township 17 South, Range 30 Mast; Grayburg will Company of New Mexico Burch No. 4-B C 35 Section 2), Township 17 South, Range 29 Mast; Grayburg will Company of New Mexico Keely No. 5-A, NE NE SE Section 24, Township 17 South, Range 29 Mast; Grayburg will Company of New Mexico Keely No. 9-B, U No 3E Section 26, Township 17 South, Range 29 Mast; Western Production Company, Inc. Burch No. 3-C No SW 3E Section 19, Township 17 South, Range 30 Mast; Western Froduction Company, Inc. Keely 12-C C SW No. Section 25, Township 17 South, Range 29 Mast (Snut in since May of 1947 due to mechanical difficulties of injecting gas at over 1000 FSI).

As of December 31, 1947, total field gas through gathering system from the Grayburg Zone for the year 1947 has been 1,377,439 MCF of which 602,587 MCF has been returned to earth. Distribution of the injected gas was as follows:

Grayburg wil Company of New Mexico Burch No. 8-A 183,410 MCF Grayburg wil Company of New Mexico Burch No. 4-B 111,877 MCF Grayburg wil Company of New Mexico Keely No. 5-A 139,378 MCF Grayburg wil Company of New Mexico Keely No. 9-B 69,824 MCF Western Froduction Company, Inc. Burch No. 3-C 80,418 MCF Nestern Froduction Company, Inc. Keely No.12-C 17,680 MCF Total Gas Injected - 1947 602,587 MCF



- (2) <u>Compressors and Gas Volume</u>: The Unit Operator completed the installation of a third 300 HF Ingersoll-Rand Compressor, bringing the theoretical plant capacity to 3,750 MCF gas per day.
  - (3) Froduction: No change.
  - (4) barulations: No change.
- (5) Engineering Data: No change, with the exception that field wide gas/oil ratio tests will be taken at least once every six months.
- 3. Modification of Plan: This plan may be modified from time to time by the Unit Operator with the approval of the Oil and Gas Supervisor to meet changed conditions or to take advantage of information obtained from drilling of any wells which might make the location of any subsequent well to be drilled hereunder unreasonable and to meet changed conditions which may develope in the operation of the repressuring program. The original Plan of Operation with this modification to remain in effect to December 31, 1948, prior to which date Unit Operator shall submit for the approval of the oil and Gas Supervisor a new Plan of Operation or appropriate Modification or Ammendment of Plan, for the celendar year of 1949.

Respectfully submitted,

MOSTASCAREA TINU CAUGUARD

Vice President

Approved of	this t	he,	1948.
oil and (			or



## BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

#### Santa Fe. New Mexico

NOTICE OF PUBLICATION STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

"The Oil Conservation Commission of New Mexico, pursuant to law, hereby gives public notice of the following hearing to be had at a regular meeting of the Commission October 15, 1947, beginning at 10:00 o'clock A.M., on said date at Santa Fe, New Mexico:

#### "STATE OF NEW MEXICO TO:

All named parties in the following cases, and notice to the Public:

#### CASE NO. 112

"In the matter of the application of the Grayburg Oil Company of New Mexico for permission to produce well No. 13-B on its Keely (federal) lease in the NE/4 of Section 26, Township 17 South, Range 29 East, N.M.P.M. in Eddy County, New Mexico.

# CASE NO. 113

\*In the matter of the application of Roy H. King for an unorthodox location on the SW/4 SE/4 section 27, Township 18 South, Range 38 East in the Hobbs Pool, Lea County, New Mexico.

"Given under the seal of the Oil Conservation Commission of New Mexico. at Santa Fe, New Mexico, on October 1, 1947.

OIL CONSERVATION COMMISSION

/s/ R. R. Spurrier

By: R. R. Spurrier, Secretary

## S E A LM

Said meeting was called at 10:00 o'clock A.M., Wednesday, October 15, 1947, in the Coronado Room of the La Fonda Hotel, Santa Fe, New Mexico.

# MEMBERS OF THE COMMISSION PRESENT

Hon. Thomas J. Mabry, Governor, Chairman Hon. John E. Miles, State Land Commissioner, Member

Hon. R. R. Spurrier, Secretary, State Oil Conservation Commission, Member

Hon. Luke J. Frazier, Attorney

Hon. George Graham, Attorney

## REGISTER

NAME	<u>COMPANY</u>	ADDRESS
R. F. Miller	Grayburg Oil Company of N. M.	Artesia, N. M.
John E. Cochran, Jr.	Attorney for Grayburg Oil Company	Artesia, N. M.
J. B. Hardin	;	Hobbs, N. M.
Frank D. Gardner	Sinclair Prairie Oil Company	Midland, Texas
Harvey Hardison	Standard of Texas	Midland, Texas
Foster Morrell	U. S. G. S.	Roswell, N. M.
Lloyd L. Gray	Gulf Oil Corporation	Tulsa, Oklahoma
Roy O. Yarbrough	Oil Conservation Commission	Hobbs, N. M.
M. C. Brunner	Shell Oil Company	Hobbs, N. M.
L. E. Slagle	Shell Oil Company	Hobbs, N. M.

## Register (Cont'd)

## NAME

# Walter Famariss, Jr Raymond A. Lynch H. R. Mearkley John M. Kelly W. D. Girand, Jr. W. E. Hubbard R. S. Dewey Nelson Jones Guy Shepard R. J. Heard Joe W. Lackey Wm. E. Bates E. D. Corbett Jack W. Slackgole Glenn Staley N. Raymond Lamb

William B. Macey
J. O. Seth
John D. Culp
A. E. Willig
H. D. Murray
Frank E. Isett
Henry Forbes
G. H. Gray

#### COMPANY

Phillips Petroleum (Legal Dept.) Phillips Petroleum Co. Independent Attorney Humble Oil Company Humble Oil Company Humble Oil Company State of New Mexico Grayburg Oil Company Malco Refineries, Inc. The Texas Company Humble Pipe Line Company Standlind Oil Purchasing Co. Lea County Operators N. M. Bureau of Mines & Mineral Resources Oil Conservation Commission Stanolind Oil Company Stanelind Oil Company The Texas Company The Texas Company Roy H. King (Representative) Continental Oil Company Repollo Oil Company

## ADDRESS

Hobbs, N. M.
Midland, Texas
Odessa, Texas
Roswell, N. M.
Hobbs, N. M.
Houston, Texas
Midland, Texas
Houston, Texas
Santa Fe, N. M.
Loco Hills, N.M.
Roswell, N. M.
Midland, Texas
Midland, Texas
Midland, Texas
Midland, Texas
Hobbs, N. M.

Artesia, N. M.
Artesia, N. M.
Santa Fe, N. M.
Hobbs, N. M.
Ft. Worth, Texas
Midland, Texas
Dallas, Texas
Midland, Texas
Midland, Texas
Midland, Texas

# PROCEEDINGS

Meeting called by John E. Miles, Land Commissioner & Member. Case Docket for #112 read by George Graham, Attorney.

BY JOHN E. COCHRAN, JR.

Governor Mabry, Members of the Commission: This is a matter in which the Grayburg Oil Company of New Mexico makes application for permission to produce Well No. 13-B on the Keely lease located in the NE/4 S.26, T. 17S, Range 29E, N.M.P.M., in Eddy County, New Mexico.

(After being duly sworn, Mr. Raymond Miller testified as follows)

MR. COCHRAN:

Will you state your name please?

MR. MILLER:

Raymond Miller.

MR. COCHRAN:

By whom are you employed?

Mr. Miller:

Grayburg Oil Company of New Mexico.

MR. COCHRAN:

In what capacity are you employed?

MR. MILLER:

As Production Engineer.

MR. COCHRAN:

As Production Engineer for Grayburg Oil Company, what do your duties consist of?

#### MR. MILLER:

They include the setting of casing, acidizing and composition of the well's termination or bottom hole pressure, gas-oil ratio and compilation of records.

#### MR. COCHRAN:

As production engineer, you are familiar with all the properties and wells located in Eddy County?

- A. I am.
- Q. In your application you designated the Keely B well?
  - A. Yes, sir.
- Q. Do you have a map the Commission might see the location of that well?
  - A. Yes, sir. I have here a plat showing the entire unit area of the Keely B Well.
- Q. The quarter-section cross stitched on the map, that is a part of the Keely B Lease?
  - A. Yes, sir.
- Q. How many wells have been drilled on this lease?
  - A. Thirteen.
- Q. How many in the NE/4 of section 26?
  - A. Five.
- Q. Will you explain to the Commission when the first four wells were drilled on this tract?
  - A. Keely 1-B was completed in April 30, 1943. Keely 4-B NE/4 completed March 30, 1944. Keely 7-B SW/4 NE/4 completed July 31, 1944. 8-B SE/4, NE/4 completed February 21, 1945.
- Q. From what horizons do those four wells produce?
  - A. San Andres.
- Q. From what depth?
  - A. You mean top of San Andres or pay?
- Q. Pay?
  - A. 2800 feet to 3100 feet.
- Q. On this 160 acre tract, the fifth well is located approximately in the center of the tract will you tell the Commission the history of the drilling?
  - A. This well, located 1345 feet from the north line and 1295 feet from the east line, S/26. The well was drilled to a total depth of 5076 feet, completed in the Yeso Formation, unproductive of oil or gas at that depth. We plugged back to 3050 feet, used 7 inch casing and completed it as an oil well capable of producing in excess of 200 barrels per day.
- Q. You have tested the well?
  - A. Yes.
- Q. Is the well shut in at the present time?

- A. Yes, it is shut in.
- Q. In your application to the Commission, you asked that you be permitted to produce the 13-B Well?
  - A. Yes, sir.
- Q. In doing that you proposed to produce the total allowable as fixed by the Commission for the total 4 wells on the 160 acre tract?
  - A. Yes, sir.
- Q. The production from that 160 acres would be the equivalent of the allowable for the 4-40 acre units?
  - A. Yes, sir.
- Q. In your opinion, would producing this tract in that manner be in the interest of conservation and prevention of waste?
  - A. It would.
- Q. In your opinion would it result in a greater recovery of oil from that 160 acres?
  - A. I believe it would.
- Q. This is a federal lease?
  - A. Yes, sir.
- Q. Have you communicated with the United States Geological Survey to ascertain their feeling about this application?
  - A. We have, and I have here a letter from Mr. Foster Morrell, District Supervisor, in which he states the Survey has no objection to our producing this well in this manner.

#### MR. COCHRAN:

We offer this letter in evidence.

(Letter from Mr. Foster Morrell, District Supervisor of the United States Geological Survey, offered in evidence as Exhibit #1.)

- Q. Mr. Miller, if you are permitted to produce the 13-B well, will the rights of any other operator be affected?
  - A. No, sir. As shown on the map, all surrounding property is owned by the Grayburg Oil Company and its associated companies.
- Q. If the Commission grants this permission to produce this well, will it enable you to make certain engineering studies?
  - A. Yes it will. We contemplate selecting other quarter sections with comparable wells, comparing the decline and bottom hole pressure and increase in gas—oil ratio with the other quarter sections and determine perhaps a better spacing program for the unit area as a whole.
- Q. The production of this tract in this phase would guide you, to a certain extent, in your development.
  - A. Yes, sir. It would.

MR. R. R. SPURRIER:

We have had several cases of 5-option drilling before the Commission, and in most cases the Company has come before the Commission before the well was drilled.

MR. SPURRIER (Cont'd.)

I wonder if you want to show in the record you drilled this well for some other purpose?

MR. COGHRAN:

When you commenced drilling 13-B, what was the circumstances surrounding the drilling of that well, what depth did you propose to go?

- A. 5,000 feet. Did drill it to a total depth of 5076 feet and as I said, penetrated the upper Yeso.
- Q. At the time this well was drilled it was a wildcat test in search of deeper test?
  - A. Yes, sir.
- Q. Did you have any definite plan as to what you might do with the well if it were not a producer?
  - A. Yes. The United States Geological Survey originally approved this location when we proposed, if unproductive, to use it as a gas inject well in re-pressuring; in asmuch as it was a very good producer and gave us an opportunity to make these studies, we thought it would be in the interest of conservation to produce the well.
- Q. As an oil well instead of inject well?
  - A. That is right.
- Q. You have obtained permission from the United States Geological Survey to do that?
  - A. Yes, sir.
- Q. That is the reason you make this application to produce this well as an oil well?
  - A. Yes, sir.

MR. SPURRIER:

How much do you anticipate producing from 13-B per day?

A. It will be approximately 37 or 38 barrels a day.

MR. SPURRIER:

Then how much would you produce from each of the other four?

A. I-B and 4-B are marginal wells - during the Month of September they produced an average of 29 barrels per day. 7-B and 8-B, top allowable wells, during the month of September produced 48 barrels per day.

COMMISSIONER MILES:

Any other witnesses? (No response)

Any questions?

MR. GEORGE SELINGER (Skelly Oil Company)

Mr. Miller, I was interested in your statement with respect to future development, you were conducting some reservoir tests which would affect your future development in this area. Is it your idea - you intend to drill 5 option wells on other quarter sections?

A. If these reservoir studies indicate it would be better, we have that in mind.

#### COMMISSIONER MILES:

That isn't included in this hearing?

A. That is right.

#### MR. SELINGER:

I understand your application is to divide the total lease allowable amongst the five wells?

- A. Correct.
- Q. I believe two of them are now marginal units, also all the wells on the lease this particular quarter section become marginal units. How do you intend to divide your allowable in those instances?
  - A. If they are all marginal wells we will be able to produce legally all the oil the wells will make.
- Q. In other words, you will produce all five wells to capacity?
  - A. That is right.
- Q. An operator that offsets a tract as five wells in which his own tract has only four wells when all wells are down to margin, the five well tract will receive more oil than the four well tract or marginal tract?
  - A. They might get a little less if the five wells were not making as much as the four wells.
- Q. Suppose all wells produce 35 barrels and the adjoining one producing 35 barrels, the five well tract would receive more oil?
  - A. That is right. The other operator would have the privilege of drilling more wells.
- Q. They would have a tendency of drilling five option wells in marginal tracts?
  - A. That would not necessarily be true, it would depend entirely on the individual operator.

#### MR. FOSTER MORRELL:

For the benefit of the record - a question for some time, particularly in the shallower area in Eddy County, as to whether full recovery of oil can be obtained through 40-acre spacing of wells. There have been a number of applications for five option wells. It has been explained to the Commission why this particular location was approved by my office. Primarily, because it was a dry hole - x Deep test formations, in view of the fact a good oil well, we recommended and gave our approval of use of this well as an oil well provided they obtained the consent of the Commission - San Andres production of 3100 feet can possibly increase ultimate recovery by additional drilling. This particular well will aid in determining whether that oil could be obtained within the Grayburg Cooperative Repressuring Agreement approved by the Department. We are working now toward completing unitization of upper zones which will permit closer space irrespective of 40 acre sub-division lines. It is, I think, very good as a conservation move. The same thing in Square Lake and Maljamar, it is a matter whether additional oil will pay the cost of drilling.

#### COMMISSIONER MILES:

Anyone else have a question? (No response)

The Order will be granted.

# CASE NO.113

BY MR. FRANK E. ISETT (Representing Mr. Roy H. King).

Our request is for an unorthodox location in S. 27, T. 185, Range 38E, in the Hobbs Pool, Lea County, New Mexico.

We would like to amend that petition calling for the location to be 600 feet from the south line and 5 feet from the west line and the SW/4 of the SE/4 of section 27, township 185, range 38E. Since making this original petition I have had Mr. West make a map of the area and he finds the location would have to be 650 feet from the south line and, as shown on this plat, due to the fact that it ends in an addition to the City of Hobbs and these plats here are built up and have houses on them, the locations could not be 320 feet from each line on that account; therefore, we ask permission to drill the well 650 feet north of the south line which puts it on vacant lots and will be no damage to the property. We also request it be 5 feet from the west line as this is the particular Shell Oil Company used in drilling #2 Sanger in direct offset to the West. They made 330 feet from the south line and 5 feet from the west line. There is considerable depth in the formation to the east and for that reason we asked the Commission for a location that is the same pit of the Shell Oil Company.

## GOVERNOR MABRY:

Shell Oil Company seem to agree to this?

MR. ISETT:

Yes, sir, they have approved it.

GOVERNOR MABRY:

The amendment is allowed.

(After being duly sworn, Mr. Isett testified as follows)

Our petition is that we be granted unorthodox location on the Sanger lease at the edge of the City of Hobbs, S. 27, T. 185, R 38E. Our reasons for desiring this location to be 650 feet from the south line of the City of Hobbs is the City has built an addition in this area; we have permission of the Shell Oil Company to drill this well, and reason for asking the location 5 feet from the west line we are using the same method the Shell Oil Company used on their #2 Sanger investment company well, which is the west offset to our proposed well. The reason for this unorthodox location is the fact that the dip in the formation to the west is very rapid. Our geologist thinks we would stand a great deal better chance of getging a producer, consequently aid in the recovery of oil from that section.

## MR. LAKE FRASIER:

Do you offer in evidence Exhibit No. 2?

A. I offer in evidence a letter from the Shell Oil Company, dated September 26, 1947, as Exhibit #2.

MR. FRASIER:

What is Exhibit No. 1?

A. Exhibit No. 1 is a map drawn by Mr. West a licensed engineer, showing the preposed location of this well.

MR. GEORGE GRAHAM:

Mr. Isett, the original lease provides no well can be drilled within 300 feet of a structure?

A. I never have seen the original lease. Mr. King secured the formula from the Shell Oil Company. There were no structures on the plat at the time except a lease house and windmill in the center of the section.

MR. GRAHAM:

Your desire is to drill a well that will still be on your structure and at the same time away from the house unit?

A. It will be across the road from any house.

MR. GRAHAM:

The land is privately owned land?

A. Yes, sir.

GOVERNOR MABRY:

Is that all?

MR. SPURRIER:

In event you obtain production here, what would a property owner who offsets you - what would his alternative be, is it possible he could drill a well to secure a fair share of oil that underlies the property?

A. No, sir. The surface of the land was sold by Sanger Investment Company to a real estate man in Hobbs. They bought it knowing about the oil and gas lease made by Sanger Investment Company and Shell.

MR. NELSON JONES (Humble Oil Company)

Did I understand you to say your reasons for wishing to drill at the point shown in the application you are afraid you might get a dry hole as a regular hole.

A. We could not drill the regular 330 because it would put it right where a house stands.

MR. JONES:

I believe I heard you say 5 feet - one of the lines?

A. Yes, sir.

MR. JONES:

You purpose to get that close to the line is to have a better chance of getting production?

A. Yes, sir.

MR. JONES:

It is your feeling part of this acreage is likely to be dry?

A. Yes, sir.

MR. JONES:

In event you get a producer 5 feet from the line, do you expect the full 40 acre allowable?

A. I am not a geologist or engineer. If we find San Andres high for instance #5 of the Shell Oil Company found a considerable
depth as compared to #3, the west offset, yet they are allowed

a full 40 acre unit. No. 2 of the Shell which is 5 feet from the west line found a very nearly flattening and its allewable is full unit. If we should find that flattening continues we feel we should be allowed a 40 acre unit.

MR. JONES:

Suppose you find it doesn't contain it?

A. I suppose it would be up to the Commission.

MR. JONES:

I am trying to get your attitude. It would be your whole tract wasn't productive — a full allowable would be allocated to a 40 acre unit.

A. The Shell-Turner #1, directly south offset to this well is allowed a 40 acre unit.

MR. JONES:

Do you intend to take any precaution to assure a straight hole will be drilled?

A. Yes, sir.

MR. JONES:

What method do you use?

A. In Texas we usually run an acid test and find out how the hole is.

MR. JONES:

You intend to file any result with the Commission?

A. We would be glad to, yes, sir.

MR. JONES:

Thank you.

COMMISSIONER MILES:

Anyone else?

MR. A. E. WILLIG (The Texas Company)

I don't believe you have described the amount of acreage contained in your lease?

A. It is exceptional - we have an option of four 40-acre tracts. We decided as we finish each well, if the first well is a dry hole the chances are we wouldn't exercise our option on the others.

MR. WILLIG:

If you get production on this well, how much acreage would that valid?

A. Valid 40 acres and have option to drill on any other 40 on the section.

MR. MORRELL:

I have no position with respect to the necessity for adjusting locations by reason of townsite of Hobbs or any other townsite. I do raise a serious question with respect to drilling within 330 feet of the line of a 40 acre pro-ration unit where it depends entirely on ownership of adjoining acreage. In this case the Petitioner has a satisfactory agreement

with the Shell for approving this particular location as between themselves. The question is raised in the matter of all parties concerned. If this 40 acres - this 40 acre tract was owned and offset the operator objected. that party would be unable to drill this location. Granting this petition outright would then give right to one party, the other party might not be entitled to the consideration which would be given that operator to recover such oil as under his property. Then the question in this type of case, an adjustment of allowable might not permit him to drill the well where he thinks best. A well 5 feet from the line could not be approved on a federal oil and gas lease. If this particular 40 happened to be federal land he could not drill - we might have 40 acres in a similar situation and would have to deny that right to our lesses. We desire to give our lesses the same right of neutralization, if the State can allow those we can go under the State law and make an exception under the Federal. The question would be whether an adjustment would be possible to drill as close as 5 feet to the line. I offer this suggestion for consideration.

#### COMMISSIONER MILES:

Anyone else? (No Response)

The case will be taken under advisement and a decision rendered at a later date.

MR. ISETT:

I would like to make another statement - In reference to getting permission to drill this well within 300 feet, when this lease was taken over there was just one little old shack on the land.

I want the record to show when the Shell Oil Company took over the lease in its regular form which contains a clause that no well shall be within 300 feet of any house now on said premises, but does not pertain to any house built after the lease is taken over. JOHN E. COCHRAN, JR.

CARPER BUILDING

ARTESIA, NEW MEXICO

November 20, 1947

Mr. George A. Graham, Attorney New Mexico Oil Conservation Commission State Capitol Building Santa Fe. New Mexico

Dear Mr. Graham:

At Hearing held on October 15, 1947 by the New Mexico Oil Conservation Commission in Case No. 112, Grayburg Oil Company of New Mexico was granted permission to produce well No. 13-B on its Keeley Lease in the NE/4 of Section 26, Township 17 South, Range 29 East, N.M.P.M. in Lea County, New Mexico.

I presume that an Order has now been written by the Commission in this case, and I would appreciate it if you would send me two copies of this Order.

If you can conveniently do so, I would appreciate it also if you would place my name on the Oil Conservation Commission mailing list so that I may receive notices of hearings and copies of all orders entered.

Very truly yours

John E. Cochran, Jr.

JEC:rm

#### UNITED STATES

## DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

P. O. Box 997
Roswell, New Mexico
October 3, 1947

Mr. R. J. Heard Vice President Grayburg Oil Company of New Mexico Artesia, New Mexico

Dear Mr. Heard:

Receipt is acknowledged of a copy of your petition executed September 29, 1947, to the Oil Conservation Commission of New Mexico requesting permission to produce oil from well No. 13-B located in the NE2 of sec. 26, T. 17 S., R. 29 E., lease Las Cruces 028784-93(b), Grayburg-Jackson pool, Eddy County, New Mexico.

As stated in your application, Keeley well No. 13-B is located 1345 feet from the north line and 1295 feet from the east line of section 26. Approval to drill a well in this location was granted only for the reason that the well was originally intended to test pre-San Andres formations to an approximate depth of 5,000 feet and that if the potential oil and gas zones in the lower formations proved unproductive the well was to be plugged back to be used as an injection well in conjunction with the operation of the Grayburg Cooperative and Unit Agreement.

The lower formations were found unproductive to a depth of 5076 feet and after being plugged back to a depth of 3050 feet oil production was developed in the San Andres formation, the zone productive in other wells in the immediate vicinity, and the well was completed with a potential capacity of 200 barrels of oil per day. You now propose to produce well No. 13-B as an oil well in conjunction with wells Nos. 1-B, 4-B, 7-B and 8-B, each of which is located in the approximate center of the 40-acre subdivisions in the NEA of section 26.

In view of the potential capacity of the subject well, it is believed that it would be of greater value as a producing well than if it were used as a gas injection well and that it would increase the ultimate recovery of oil from the leasehold. Also in producing the five wells, information may be gained regarding the productive characteristics of the reservoir which may lead to the establishment of a

more efficient well spacing pattern for further drilling and development of the area. Producing this well will not create any inequities from drainage from other leases as the surrounding lands are held by your company. Accordingly, no objection is offered to your proposal, provided that the production from the wells conforms with the general and any special proration orders of the State Oil Conservation Commission.

If your petition is approved by the New Mexico Oil Conservation Commission, you are requested to file a notice to produce this well on our form 9-331(a) for approval by the District Engineer before producing operations are commenced.

Very truly yours,

FOSTER MORRELL.

Supervisor, Oil and Gas Operations.

cc: Mr. Heard