

SECRET

Case Number
4901

Application
Transcripts.

Small Exhibits

ETC.

dearnley, meier & mc cormick

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE: 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 871061
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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE ROOM, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
February 28, 1973

EXAMINER HEARING

IN THE MATTER OF:

Application of Belco Petroleum Corporation
for a dual completion, Eddy County, New
Mexico.

Case No. 4901

BEFORE: Elvis A. Utz
Examiner

TRANSCRIPT OF HEARING

1 MR. UTZ: Call Case 4901.

2 MR. CARR: Case 4901. Application of Bel
3 Petroleum Corporation for a dual completion, Eddy County,
4 New Mexico.

5 MR. UTZ: Case 4901 was readvertised for purposes
6 of correcting the application to change the dual completion
7 from Strawn to Wolfcamp completion which then would be a
8 Wolfcamp and a Morrow rather than a Strawn and a Morrow; is
9 that correct?

10 Are there any appearances in this case?

11 Let the record show there were no appearances and
12 no testimony offered. The case will be taken under
13 advisement. The Hearing is adjourned.

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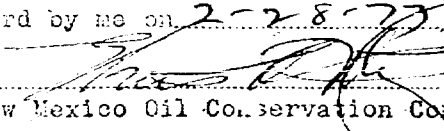
25

1 STATE OF NEW MEXICO)
2) ss
3 COUNTY OF BERNALILLO)

4 I, JANET RUSSELL, a Notary Public, in and for the County
5 of Bernalillo, State of New Mexico do hereby certify that the
6 foregoing and attached Transcript of Hearing before the New
7 Mexico Oil Conservation Commission was reported by me; and
8 that the same is a true and correct record of the said
9 proceedings to the best of my knowledge, skill and ability

10
11 
12 NOTARY PUBLIC

13 My Commission Expires:
14 November 24, 1976

22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the Examiner hearing of Case No. 4901
25 heard by me on 2-28-73, 1973

Examiner
New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

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

**GOVERNOR
BRUCE KING
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMJO
MEMBER
STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR**

March 6, 1973

**Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico**

Re: Case No. 4901
Order No. R-4474
Applicant:
Belco Petroleum Corporation

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
 Artesia OCC x
 Aztec OCC
 Other

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. 4901
Order No. R-4474

APPLICATION OF BELCO PETROLEUM
CORPORATION FOR TWO DUAL COMPLE-
TIONS, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 31, 1973, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 6 day of March, 1973, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Belco Petroleum Corporation, seeks authority to complete its Union Mead Well No. 1, located in Unit H of Section 8, Township 22 South, Range 27 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from undesignated Strawn and Morrow gas pools through the casing-tubing annulus and through tubing, respectively.

(3) That the applicant further seeks authority to complete its Union Mead Com Well No. 2, located in Unit N of Section 4, Township 22 South, Range 27 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from undesignated Wolfcamp and Morrow gas pools through tubing and through the casing-tubing annulus, respectively, by means of a crossover assembly.

(4) That the mechanics of the proposed dual completions are feasible and in accord with good conservation practices.

(5) That approval of the subject application will prevent waste and protect correlative rights.

-2-

Case No. 4961
Order No. R-4474

IT IS THEREFORE ORDERED:

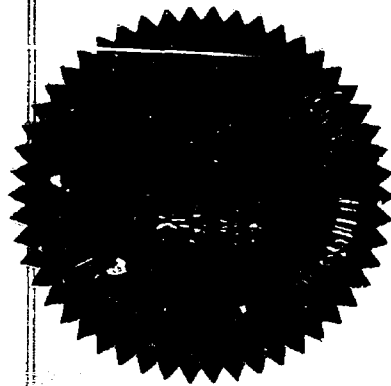
(1) That the applicant, Belco Petroleum Corporation, is hereby authorized to complete its Union Mead Well No. 1, located in Unit H of Section 8, Township 22 South, Range 27 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from undesignated Strawn and Morrow gas pools through the casing-tubing annulus and through tubing, respectively.

(2) That the applicant is further authorized to complete its Union Mead Com Well No. 2, located in Unit N of Section 4, Township 22 South, Range 27 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from undesignated Wolfcamp and Morrow gas pools through tubing and through the casing-tubing annulus, respectively, by means of a cross-over assembly.

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Shut-In Pressure Test Period for the Strawn, Wolfcamp, and Morrow gas pools.

(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

Bruce King
BRUCE KING, Chairman

Alex J. Armitage
ALEX J. ARMITAGE, Member

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

S E A L

dr/

Case 4901

Recd. 2-28-73

Rec. 3-1-73

Grant Belco permission to Dually
complete its Union Made Com #2

W-14-22527E to produce Gas from
Under W.C. & Morrow pools.

Thos R. [Signature]

(Continued from page 1)

seeks an administrative procedure for the drilling of additional injection wells at orthodox and unorthodox locations without notice and hearing. Applicant further seeks an order of the NW/4 of the aforesaid Section 7 from the Arriba Pool to be added to the concurrent extension of the Loco Hills Pool to include the lands.

Cont. to next month
CASE 4913: Application of Lone Star Industries, Inc., for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the N/2 of Section 12, Township 30 North, Range 5 West, to be dedicated to a well to be drilled at a standard location to the Basin-Dakota Pool.

Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4901: (Continued and Readvertised)

Application of Belco Petroleum Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Union Mead Com Well No. 2 located in Unit N of Section 4, Township 22 South, Range 27 East, Eddy County, New Mexico, to produce gas from undesignated Wolfcamp and Morrow gas pools through the tubing and the casing-tubing annulus, respectively, by means of a crossover assembly.

CASE 4914: Southeastern New Mexico nomenclature case calling for an order for the creation and extension of certain pools in Lea, Eddy and Roosevelt Counties, New Mexico.

(a) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Burton Flat-Morrow Gas Pool. The discovery well is the Monsanto Company Burton Flat Deep Unit No. 1 located in Unit O of Section 3, Township 21 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM
Section 3: Lots 9 through 16

(b) Create a new pool in Lea County, New Mexico, classified as an oil pool for San Andres production and designated as the Lea-San Andres Pool. The discovery well is the Superior Oil Company Government "E" No. 2 located in Unit A of Section 25, Township 19 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM
Section 25: NE/4

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

February 1, 1973

Mr. Jason W. Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: Case No. 4901

Dear Mr. Kellahin:

As a result of Case No. 4901, Commission Order No. R-4474 is being entered approving the dual completion of the Belco Petroleum Corporation, Union Mead Well No. 1 in Unit H of Section 8, Township 22 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce gas from undesignated Strawn and undesignated Morrow gas pools through the casing-tubing annulus and through tubing, respectively. However, said order will not be issued until Case No. 4901 is readvertised and called at the February 28th Commission examiner hearing. The readvertisement is required to correct that portion of the original advertisement dealing with applicant's Union Mead Com Well No. 2.

The applicant is hereby authorized to proceed with the dual completion, connection, and sale of gas from its Union Mead Well No. 1 in accordance with Order No. R-4474 to be issued.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/RLS/ir

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 31, 1973

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

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

- CASE 4897: Application of Coastal States Gas Producing Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Gonzales Federal 31 Well No. 1 located 660 feet from the South line and 760 feet from the East line of Section 31, Township 9 South, Range 33 East, Flying "M"-San Andres Pool, Lea County, New Mexico, said well being located nearer than 330 feet to another well capable of producing from the same pool.
- CASE 4898: Application of Eastern Petroleum Company for salt water disposal, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Dakota formation in the open-hole interval from 1385 feet to 1446 feet in its Navajo Well No. 21 in Unit C of Section 3, Township 27 North, Range 17 West, Table Mesa-Dakota Pool, San Juan County, New Mexico.
- CASE 4899: Application of Skelly Oil Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Morrow gas pool for its well located in Unit P of Section 9, Township 24 South, Range 29 East, Eddy County, New Mexico. Applicant further seeks the promulgation of temporary special rules therefor, including a provision for 640-acre spacing units.
- CASE 4900: Application of Skelly Oil Company for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Fusselman gas pool for its well located in Unit H of Section 20, Township 25 South, Range 36 East, Lea County, New Mexico. Applicant further seeks the promulgation of temporary special rules therefor, including a provision for 640-acre spacing units.
- CASE 4901: Application of Belco Petroleum Corporation for two dual completions, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Union Mead Well No. 1 located in Unit H of Section 8, and its Union Mead Com Well No. 2 located in Unit N of Section 4, both in Township 22 South, Range 27 East, Eddy County, New Mexico, to produce gas from undesignated Strawn and Morrow gas pools through the casing-tubing annulus and through tubing, respectively.
- CASE 4902: Application of Belco Petroleum Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its James Ranch Unit Well No. 3 located in Unit J of Section 1, Township 23 South, Range 30 East, Eddy County,

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APPLICATION FOR MULTIPLE COMPLETION

Form C-107
5-1-61

Operator Belco Petroleum Corporation		County Eddy	Date 1-10-73
Address 2000 Wilco Building, Midland, Texas		Lease Union Mead	Well No. 1
Location of Well H	Unit 8	Township 22-S	Range 27-E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO XX

2. If answer is yes, identify one such instance: Order No. _____ ; Operator Lease, and Well No.: _____

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Strawn		Morrow
b. Top and Bottom of Pay Section (Perforations)	10,292' - 10,317'		11,167' - 11,184'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

4. The following are attached. (Please check YES or NO)

- | Yes | No | |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.* |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112A.) |

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Union Oil Company, 300 Security National Bank Building, Roswell, New Mexico 88201

T. J. Sivley, Drawer GG, Artesia, New Mexico 88210

Cities Service Oil Company, Box 4906, Midland, Texas 79701

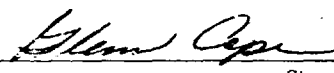
Antweil Company, Box 2010, Hobbs, New Mexico 88240

Delta Drilling Company, Box 866, Odessa, Texas 79760

Maybee Petroleum Company, Arp, Texas

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES XX NO _____. If answer is yes, give date of such notification **1-10-73**.

CERTIFICATE: I, the undersigned, state that I am the **District Engineer** of the **Belco Petroleum Corporation** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.


Glenn Cope Signature

*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

25	30	29 Cities Ser. J. Simpson	28 Cities Ser. J. A. Cowley R-27-E	27	26
36	31	32 T-21-S	33	34	35
1	6	5 Belco 3-Union Mead	4 Belco 2-Union Mead Comm	3	2
12	7	8 Belco 1-Union Mead	9 Union J-Mead R-27-E	10 Union 1-2	11
13	18	17 T-22-S	16 Union	15 Union J-Forni	14
24 Corinne Grace 2-Gopogo	19	20	21 Antwell J-Randall	22	23

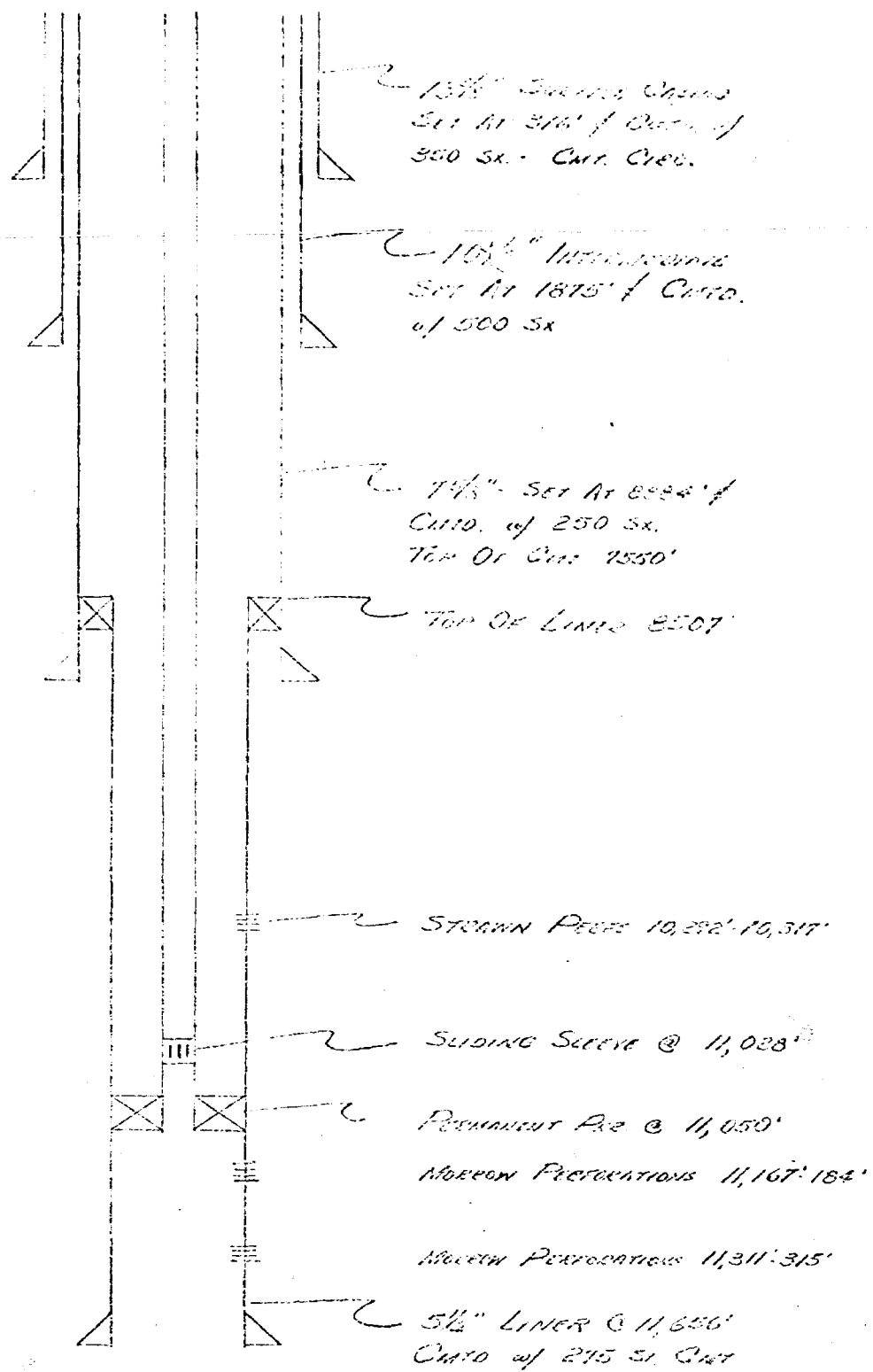
BELCO PETROLEUM CORP.

MIDLAND DISTRICT

BELCO PETROLEUM CORPORATION

UNION MEAD WELL NO. 1

13th St. S. Chas.
 Union Mine Well No. 1
 West Virginia



dearnley, meier & mc cormick

209 SIMMS BLDG., P.O. BOX 1032, PHONE 243-0091, ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST, ALBUQUERQUE, NEW MEXICO 87108

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
OIL CONSERVATION COMMISSION CONFERENCE ROOM
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
Wednesday, January 31, 1973

EXAMINER HEARING

IN THE MATTER OF:

Application of Belco Petroleum
Corporation for two dual
completions, Eddy County, New
Mexico.

Case No. 4901

BEFORE: Richard L. Stamets

TRANSCRIPT OF RECORD

dearnley, meier & mc cornick

209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST, ALBUQUERQUE, NEW MEXICO 87108

1 MR. STAMETS: Call next case 4901.

2 MR. CARR: Case 4901, Application of Belco Petroleum
3 Corporation for oil completions, Eddy County, New Mexico.

4 MR. KELLAHIN: Jason Kellahin, Kellahin and Fox,
5 Santa Fe, New Mexico appearing for the applicant. We have one
6 witness I'd like to have sworn.

7 EDWARD GLENN COPE

8 was called as a witness and after being duly sworn according
9 to law, testified as follows:

10 (Whereupon, a brief recess was held.)

11 MR. STAMETS: The hearing will come to order, please.
12 Mr. Kellahin, let's see, was the witness sworn?

13 MR. KELLAHIN: Yes, he is.

14 MR. STAMETS: You may proceed.

15 DIRECT EXAMINATION

16 BY MR. KELLAHIN

17 Q Would you state your name, please?

18 A My name is Edward Glenn Cope.

19 Q By whom are you employed and what position, Mr. Cope?

20 A I am employed as district engineer by Belco Petroleum
21 Corporation in Midland, Texas.

22 Q Have you ever testified before the Oil Conservation
23 Commission or one of its Examiners and made your
24 qualifications as a petroleum engineer a matter of
25 record?

dearnley, meier & mc cormick

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- 1 A Yes, I have.
- 2 Q Are you familiar with the application in Case 4901?
- 3 A Yes, I am.
- 4 Q And does that come within your jurisdiction as petroleum
5 engineer for Belco?
- 6 A Yes. That's under my supervision.
- 7 MR. KELLAHIN: Are the witness's qualifications
8 acceptable?
- 9 MR. STAMETS: They are.
- 10 Q What is proposed by Belco Petroleum Corporation in case
11 4901?
- 12 A In Case 4901, permission to dually complete the Union
13 Mead Well #1 in Unit H of Section 8, Township 22 South,
14 Range 27 East, Eddy County, New Mexico, in the Strawn and
15 Morrow formations.
- 16 Q And you are also seeking to recomplete the Union Mead
17 Com Well No. 2; is that correct?
- 18 A That is correct.
- 19 Q Referring to what has been marked Applicants Exhibit No. 1
20 would you discuss the information shown on that Exhibit?
- 21 A Okay. Our Exhibit No. 1 is a New Mexico Oil Conservation
22 Commission Form C-107 which is our application for
23 multiple completion for the Union Mead Well No. 1. This
24 gives the two producing zones in the well, the depth of
25 the two producing zones, and the list of the ~~offset~~

dearnley, meier & mc cormick

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1 operators.

2 Q Now, ~~referring~~ to what has been marked as Exhibit No. 2,
3 would you identify that Exhibit?

4 A Okay. Exhibit No. 2 is a plat on the area surrounding
5 the Union Mead Well No. 1 and the Union Mead Com Well
6 No. 2 and a two-mile radius showing the wells which may
7 be relative to the subject wells which we are requesting
8 dual completions.

9 Q Does that show the producing formations of those wells?

10 A No, it does not.

11 Q Do you know the producing formations of the wells within
12 a two-mile radius?

13 A Yes, I do.

14 Q What formations are they producing from?

15 A The Tracey, the Union Oil Tracey No. 1 in Section 10 is a
16 Delaware completion which is a shallower zone. The Union
17 Oil of California, Forni No. 1 in Section 15 is a
18 Wolfcamp completion; and I'm sure you are familiar with
19 the Corinne Grace (GO) Pogo No. 2 which is a Morrow
20 completion. I think that, well, I cannot tell you the
21 exact formation that the Randal No. 1 produces from.

22 Q Now, ~~referring~~ to what has been marked as Exhibit No. 3,
23 would you identify that Exhibit?

24 A Exhibit No. 3 has a well diagram of our Union Mead Well
25 No. 1, illustrating the pertinent information regarding

dearnley, meier & mc cormick

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1 this well as to the strings of casing set, the volumes
2 of cement used, the exact perforations, and our diagram
3 of the downhole equipment.

4 Q Now, what kind of packer are you going to use to
5 separate the two zones?

6 A The packer between the two zones is a permanent packer,
7 and it will stay in place. When we pull the tubing, we
8 cannot pull that packer.

9 Q Which zone will be produced from the tubing and which
10 from the annulus?

11 A The tubing zone will be the Morrow Formation which is the
12 lower of the two producing formations. The annulus zone
13 will be the Strawn formation.

14 Q Do either one of these zones make any volumes of fluids?

15 A The Strawn does produce a certain amount of condensate
16 in our test of this zone. We tested through the
17 annulus to see if we should or should not run crossover
18 equipment to bring that zone through the tubing; and we
19 determined that it would be more feasible just to produce
20 this zone through the annulus.

21 Q You don't anticipate any trouble on account of fluids in
22 producing that zone through the annulus?

23 A No. We do not at this time.

24 Q Now, referring to what has been marked as Exhibit No. 4,
25 would you identify that Exhibit?

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- 1 A Exhibit No. 4 is the New Mexico Oil Conservation
2 Commission Form C-122 which is a multipoint back-pressure
3 test for the Morrow zone and in our Union Mead Well No. 1
4 which shows the absolute open-flow potential of that
5 zone to be nine million twenty-two thousand.
- 6 Q What kind of pressures do you encounter in that zone?
- 7 A Are you speaking of surface pressures?
- 8 Q Surface pressures, yes, sir. You don't have a bottomhole
9 pressure on the zones, do you?
- 10 A Not --
- 11 Q Do you have a calculated bottomholed pressure?
- 12 A Yes. We do. Let me give the surface pressures. The
13 surface pressures are a matter of record in the form, of
14 course; but our surface pressures were flowing from
15 1949 pounds at the surface to 3039 pounds at the surface.
- 16 Q Now, do you have a calculated bottomhole pressure?
- 17 A Our calculated bottomhole pressure is 4792.2.
- 18 Q And that's on the Morrow?
- 19 A That's correct.
- 20 Q Now, referring to what has been marked as Exhibit No. 5,
21 would you identify that Exhibit, please?
- 22 A Exhibit No. 5 is the New Mexico Oil Conservation
23 Commission Form C-122, multipoint back-pressure test for
24 the Strawn zone in the Union Mead Well No. 1 which is the
25 upper zone.

dearnley, meier & mc cormick

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- 1 Q What kind of pressures do you have in that well?
- 2 A Well, you'll notice that the flowing tubing pressures
- 3 range from 3,126 pounds at the surface to 3,366 pounds
- 4 at the surface.
- 5 Q Do you have a calculated ~~bottomhole~~ pressure on a
- 6 Strawn?
- 7 A Four thousand seven hundred and forty-four pounds.
- 8 Q So as between the two zones, there is not a great
- 9 differential in pressures, is there?
- 10 A No. There is not a great deal of difference at all.
- 11 You'll note that these ~~bottomhole~~ pressures were, of
- 12 the ~~Strawn~~, were measured pressures, not calculated.
- 13 Q They were measured pressures. Well, with the type of
- 14 completion and the packer you are utilizing, in your
- 15 opinion, will you get effective separation between the
- 16 Strawn and the Morrow in this well bore?
- 17 A Yes, we will.
- 18 Q And there will be no damage, danger of packer leakage in
- 19 your opinion?
- 20 A No.
- 21 Q Have you made a packer leakage test?
- 22 A Not our formal packer leakage test. We produced the
- 23 Strawn zone extensively to determine that we did not need
- 24 to run a second strand tubing or anything like that, you
- 25 know, to produce this zone through the annulus, and we

dearnley, meier & mc cormick

200 SIMMS BLDG., P.O. BOX 1082, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG., EAST, ALBUQUERQUE, NEW MEXICO 87108

1 showed no communication at that time.

2 Q I see. Now, referring to what has been marked as Exhibit
3 No. 6, would you identify that Exhibit?

4 A Exhibit No. 6 has a well diagram for the Belco Petroleum
5 Corporation Union Mead Com No. 2. This is a slightly
6 different bottomhole assembly due to the fact that the
7 Morrow zone in this well is not a very strong zone,
8 tested at the rate of approximately three hundred
9 thousand cubic feet of gas per day. It's dry gas, and
10 we wish to run a notice of crossover assembly to put the
11 low zone into the annulus, as is illustrated by the
12 arrows from the higher Morrow perforations through our
13 tubing to the crossover tool and then through the
14 annulus. And we wish to bring the production from the
15 Wolfcamp zone which is a very rich gas condensate through
16 the tubing through the use of the crossover tool.

17 Q Will you want to use the crossover assembly then because
18 of the fluids produced from the Wolfcamp; is that
19 correct?

20 A That's correct.

21 Q And is that a more efficient way to handle the fluids?

22 A Yes. Our tests of the two zones in this well would
23 indicate that this would be more applicable than
24 bringing the Wolfcamp production to this surface through
25 the annulus due to the large volume of condensate which

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1 this zone makes.

2 Q Now, ~~referring~~ to what has been marked as Exhibit No. 7,
3 would you identify that Exhibit?

4 A Exhibit No. 7 is the New Mexico Oil Conservation
5 Commission Form C-107 which is an application for
6 multiple completion for the Union Mead Com Well No. 2
7 and Unit N of Section 4, Township 22 South, Range twenty-
8 seven East, Eddy County, New Mexico. This form gives
9 the producing zones in the Union Mead No. 2 as the
10 Wolfcamp and the Morrow zones and a history of the
11 ~~effect~~ operators.

12 Q Now, the application before the Commission is for a
13 dual completion in the Morrow and Strawn for the Com
14 Well No. 2. You did not complete in the Strawn; is that
15 correct?

16 A That is correct. At the time that we asked for a
17 position on the docket, we anticipated completing the
18 well in the Morrow and the Strawn which were productive
19 in the Union Mead No. 1, the ~~offsetting~~ well. The
20 Strawn zone proved to be non-productive in the Union
21 Mead No. 2. It was dense and not capable of production;
22 and consequently, we tested the Wolfcamp zone. It was
23 productive, so we wish to amend our application to
24 dually complete the well in the Morrow and the Wolfcamp
25 well instead of the Morrow in the Strawn zone.

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1 MR. KELLAHIN: If the Examiner please, we would
2 request that the case be readvertised to include dual
3 completion as it wasn't proposed.

4 MR. STAMETS: Okay, this --

5 MR. KELLAHIN: That applies only to the Union Mead
6 Com Well No. 2.

7 MR. STAMETS: Right. I would assume that the entire
8 case would have to be readvertised and the whole order held up
9 until the hearing can be held on the readvertisement.

10 MR. KELLAHIN: We would like to get the order on the
11 Union Mead Well No. 1, if possible, since there is no reason to
12 readvertise it.

13 MR. STAMETS: We will see if we can't get the first
14 half of this out.

15 MR. KELLAHIN: We would appreciate it.

16 (Whereupon, a discussion was held off the record.)

17 Q Mr. Cope, do you have any pressure information on the
18 Union Mead Com Well No. 2?

19 A Not at this time, Mr. Kellanin.

20 Q Would you anticipate that the pressures in the Morrow
21 zone would be substantially the same as in your No. 1
22 well?

23 A Yes. The only pressure information that I have for the
24 Union Mead No. 2 is from a drill stem test which we
25 took in the Morrow zone which I can make that of record

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1 should you so desire.

2 Q Is that shown on the log?

3 A Yes. It is. That's part of your exhibit.

4 Q Referring to Exhibit No. 8, is that the log on the Union
5 Mead Com Well No. 2?

6 A Yes, I believe it is.

7 MR. STAMETS: I don't have a copy of that.

8 Q Mr. Cope, on the Com No. 2 well, is the pressure
9 information that is available to you shown on that
10 Exhibit?

11 A No, sir. It is not. At this time, we realize that we
12 can obtain an allowable for this well. Our objective is
13 to obtain approval for our dual completion, and then we
14 must, you know, file our multipoint back-pressure test
15 for the two zones which will present all of our pressure
16 information even before we can get an allowable, and
17 this will be forthcoming as soon as we can obtain this
18 data. You are familiar that in the Wolfcamp zone and
19 also in the Morrow zone that, if we just take a test of
20 short duration, we sometimes obtain unreliable information;
21 and rather than present any unreliable data, I elected
22 to not present any information at this time. And after
23 we have time to run more extensive tests, then we could
24 submit this in a normal manner.

25 Q Would you anticipate that there would be a substantial

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1 difference in pressure between the Wolfcamp and the
2 Morrow?

3 A The Wolfcamp has a much higher pressure quadrant than the
4 Morrow does. However, it's encountered at a shallower
5 depth. Consequently, I think that the pressures will be
6 somewhat close to each other, not --

7 Q Now, with the type of completion you are proposing with
8 the ~~crossover~~ packer assembly, in your opinion will you
9 get effective separation between Wolfcamp and the Morrow?

10 A Yes, we will.

11 Q And you did, of course, not run a packer leakage test on
12 this well yet, either?

13 A No. At this time, we have run tests on each of the zones
14 which we can tell whether we have communication or not,
15 if you have no influence on your opposite zone when you
16 produce either of the zones. So we know that we have
17 no isolation.

18 Q And you have produced Com Well No. 2, have you?

19 A For a short period of time, yes, sir.

20 Q From what zone?

21 A From the Morrow zone and also from the --

22 Q Strawn?

23 A -- from the Wolfcamp.

24 Q Wolfcamp?

25 A Yes, sir.

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1 Q Were Exhibits 1 through 9 prepared by you or under your
2 supervision?

3 A Yes, sir. They were.

4 MR. KELLAHIN: At this time, I'd like to offer into
5 evidence Exhibits 1 through 9 inclusive.

6 MR. STAMETS: Without objection, Exhibits 1 through
7 9 will be admitted into evidence.

8 MR. PORTER: Mr. Stamets, I have a question.

9 CROSS EXAMINATION

10 BY MR. PORTER

11 Q Mr. Kellahin was questioning as to the similarity of the
12 pressures, I think, in the Morrow zone in the two wells.

13 Mr. Cope, how far apart are the two wells roughly?

14 A Mr. Porter, the two wells are diagonal ~~offsets~~.

15 Q They are?

16 A They are approximately a half-mile apart.

17 Q I see. So are you sure that they are perforated in the
18 same zones, in the same stringers?

19 A In the Morrow zone, I can testify that they are not
20 perforated in the common stringer. The stringer that is
21 productive in the Union Mead No. 1 is not productive in
22 the Union Mead No. 2, and the stringers that were
23 completed in the Morrow and the Union Mead No. 2 are in
24 the middle Morrow.

25 Q So you are not dealing with a homogeneous reservoir here

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1 when you are talking about the Morrow?

2 A Yes, sir. That is correct.

3 Q So you could expect some differential in pressures in the
4 two wells from the same zone?

5 A It's, in fact, it may be probable that there would be a
6 slight difference in those pressures.

7 Q I would think so.

8 MR. PORTER: That's all I have.

9 CROSS EXAMINATION

10 BY MR. STAMETS

11 Q Mr. Cope, have you made any studies to determine whether
12 or not these wells are connected with the South Carlsbad
13 pools to the south?

14 A Yes, we have. I would prefer not to become involved in
15 this area, if possible; but the zone which is productive
16 in the Union Mead No. 1 is not productive in the South
17 Carlsbad Field that I know of.

18 Q How about the No. 2?

19 A If you are familiar with the stratigraphic nature of the
20 Morrow formation, I would not be able to testify that
21 they were or were not. I don't believe that the zones
22 are continuous through the area. As you can see, direct
23 offsets here are not productive in the same intervals.

24 Q Looks like it is about a two-mile interval between the
25 two reservoirs at the present time.

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1 A Yes.

2 Q How about the two City Service wells in Section 13 on
3 your Exhibit No. 2? Are those deep wells, shallow wells?

4 A Mr. Stamets, I am not aware of what depth these wells
5 were drilled to.

6 Q Okay.

7 MR. PORTER: Mr. Stamets, are the City Service wells
8 in the South Carlsbad pool?

9 MR. STAMETS: They will be in the northern margin of
10 the field offsetting this No. 2 Go Pogo.

11 MR. PORTER: You say they were dry holes?

12 THE WITNESS: Yes. They are marked as dry holes.

13 MR. PORTER: I see.

14 Q (By Mr. Stamets) I made some rough calculations, Mr.
15 Cope, on the liquid production in the Strawn in the No. 1
16 Union Mead; and if I've calculated right, there is about
17 thirty barrels per million cubic feet. This seemed like
18 a pretty good amount of liquids to get up a case of
19 tubing annulus.

20 A That is correct, approximately thirty barrels per
21 million, I think, in round figures; and this is the
22 reason we tested this zone through the annulus to
23 determine that, you know, it didn't load up and we would
24 not need a second string of tubing.

25 Q You had no indication of any loading up in the hole,

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1 whatsoever?

2 A No. This appears to be a good zone.

3 Q Would you anticipate that sometime in the future you

4 would need to get in there and install **crossover**

5 equipment?

6 A We anticipated that as we produced the well, the gas

7 liquid ratio would decline and that we would probably

8 not need to alter our **downhole** equipment in the future.

9 Q Did you anticipate that the liquids will drop up in

10 relationship to the volume of gas?

11 A Yes. If you are familiar with the Strawn and the

12 Wolfcamp zone in that area, you'll see examples of this.

13 Q Now, ~~referring~~ to the Union Mead Com No. 2, you have

14 tested the Wolfcamp zone?

15 A Yes, sir, we have.

16 Q And this does make large volumes of liquids?

17 A Yes. It does. Our gas-liquid ratio is between

18 seventy-one hundred to seventy-two hundred cubic feet

19 per barrel.

20 Q Seventy-one hundred to seventy-two hundred cubic feet

21 per barrel?

22 A That is correct. It's a very rich condensate.

23 Q How soon do you anticipate the multipoint test to be

24 ready for filing on these two zones?

25 A I would anticipate that within the following week we

~~will have these tests completed.~~

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1 Q I'm going to ask that you submit one copy of those to
2 the Examiner for the record in this case.

3 A Yes, sir. We'll be glad to do this.

4 Q Having produced the two zones, you do not anticipate any
5 problem whatsoever with the installation that you have
6 in there now?

7 A No, sir. We do not.

8 MR. STAMETS: Are there any other questions of this
9 witness?

10 At the present time, these are just undesignated
11 pools? There has been no pool established?

12 THE WITNESS: You are correct. That is right.

13 MR. STAMETS: The witness may be excused. Mr.
14 Kellahin, do you have anything further to offer in this case?

15 MR. KELLAHIN: That's all we have in this case, Mr.
16 Stamets.

17 MR. STAMETS: We'll take the case under advisement,
18 and the second half of the case will be readvertised.

19

20

21

22

23

24

25

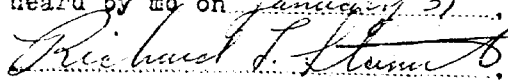
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1 STATE OF NEW MEXICO)
2) ss
3 COUNTY OF BERNALILLO)

4 I, JANET RUSSELL, a Notary Public, in and for the
5 County of Bernalillo, State of New Mexico do hereby certify
6 that the foregoing and attached Transcript of Hearing before
7 the New Mexico Oil Conservation Commission was reported by me;
8 and that the same is a true and correct record of the said
9 proceedings to the best of my knowledge, skill and ability.

10 
11 NOTARY PUBLIC

22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the Examiner hearing of Case No. 4901,
25 heard by me on January 31, 1973.

Richard L. Hunt, Examiner
New Mexico Oil Conservation Commission

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1	<u>I N D E X</u>		
2	WITNESS		
3	EDWARD GLENN COPE		
4	Direct Examination by Mr. Kellahin		3
5	Cross Examination by Mr. Porter		14
6	Cross Examination by Mr. Stamets		15
7			
8	<u>E X H I B I T S</u>		
9		<u>ADMITTED</u>	<u>OFFERED</u>
10	Exhibit No. 1 - NMOCC Form C-107	14	14
11	Exhibit No. 2 - Plat	14	14
12	Exhibit No. 3 - Well diagram	14	14
13	Exhibit No. 4 - Form C-122	14	14
14	Exhibit No. 5 - Form C-122	14	14
15	Exhibit No. 6 - Well diagram	14	14
16	Exhibit No. 7 - Form C-107	14	14
17	Exhibit No. 8 - Log	14	14
18	Exhibit No. 9 -	14	14
19			
20			
21			
22			
23			
24			
25			

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special						Test Date 10-21-72	
Company Belco Petroleum Corporation						Connection NONE	
Pool Undesignated						Formation Morrow Gas	
Completion Date 10-20-72		Total Depth 11650'		Plug Back TD 11648'		Elevation 3112' KB	
Farm or Lease Name Union Mead							
Csq. Size 5 1/2"	Wt. 20.0	d 4.778	Set At 11648'	Perforations: From 11167' To 11184'		Well No. 1	
Tbg. Size 2 7/8"	Wt. 7.9	d 2.323	Set At 11088'	Perforations: From Open Ended		Unit Sec. Twp. Rys. H 8, 22s 27e	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE						Packer Set At 11050'	
Producing Thru Tubing		Reservoir Temp. °F 191° = 11000'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State NEW MEXICO							
L 11176'	H -	G _g 0.584	% CO ₂ 0.82	% N ₂ 0.29	% H ₂ S 0.00	Prover X	Meter Run F

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g. DWT	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							3784		PACKER		7.0 Hrs
1.	6	14/64	2	750	73	80	1949	83			3.0
2.	6	11/64	2	660	63	76	2420	78			1.0
3.	6	9/64	2	460	44	97	2960	67			1.0
4.	6	7/64	2	420	38	98	3039	63			1.0
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.16	236.04	763.2	0.9813	1.309	1.051	6105.5
2	19.16	205.93	673.2	0.9850	1.309	1.047	5326.4
3	19.16	144.29	473.2	0.9662	1.309	1.028	3594.5
4	19.16	128.30	433.2	0.9653	1.309	1.025	3183.8
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.L. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	1.13	540	1.56	0.905	Dry Gas	-	0.584	XXXXXX	675	346
2.	1.00	536	1.55	0.912						
3.	0.70	557	1.61	0.946						
4.	0.64	558	1.61	0.951						
5.										

NO.	P ₁ ²	P _w *	P _w ²	P _c ² - P _w ²
1	-	3314.2	10983.9	11981.3
2	-	3735.2	13951.7	9013.5
3	-	4325.2	18707.4	4257.8
4	-	4404.2	19397.0	3568.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.394$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 9022$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.510$

Absolute Open Flow	9022	Mcfd @ 15.025	Angle of Slope @	61° 14'	Slope, n	0.549
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Remarks: * BHP @ (-8064') 11176' used for pressure calculations

Approved By Commission:	Conducted By: COLEMAN PET. ENG. CO.	Calculated By: JOE A. COLEMAN	Checked By: JOE A. COLEMAN
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NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 11-1-72	
Company Belco Petroleum Corporation		Connection None	
Pool Wildcat		Formation Strawn	
Completion Date 11-1-72		Total Depth 11,650'	
Csg. Size 5 1/2"		Plug Back TD 10,493	
Well No. 1		Farm or Lease Name Union Mead	
Perforations: From 10,292 To 10,317		Elev. 5028' GR	
Tag. Size 2 7/8"		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 10,164	
Producing Thru 2 7/8" tbg.		Baro. Press. - P _a 13.2	
Reservoir Temp. °F NA		Mean Annual Temp. °F 60	
L 10/64		H 10,305	
G _g 0.65		% CO ₂ - - % N ₂ - - % H ₂ S - -	
Prover -		Meter Run 6" x 1.75	
Taps Flange			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1.	6.065	1.750	605	12	55	3343	64	- -	Pkr.	- -	60 min.
2.	6.065	1.750	605	22	73	3263	65	"			"
3.	6.065	1.750	612	51	73	3218	65	"			"
4.	6.065	1.750	615	79	63	3126	67	"			"
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{spv}	Rate of Flow Q, Mcfd
1.	14.61	86.13	618.2	1.005	1.240	1.069	1,674
2.	14.61	116.62	618.2	.9831	1.240	1.059	2,192
3.	14.61	178.55	625.2	.9877	1.240	1.061	3,600
4.	14.61	222.77	623.2	.9924	1.240	1.062	4,254
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.92	515	1.37	.674	53.43	NA	0.650	XXXXXX	670	375
2.	.92	536	1.43	.901						
3.	.93	533	1.42	.869						
4.	.94	523	1.41	.885						
5.										

NO.	P _r ²	P _w ²	R _r ²	P _r ² - R _r ²
1.	11330	4455.2	19347	2659
2.	10847	4393.2	18775	3731
3.	10355	4026.2	16209	6297
4.	9772	3769.2	14205	8301
5.				

(1) $\frac{P_r^2}{P_r^2 - R_r^2} = 6.032$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - R_r^2} \right]^n = 9,750$

(2) $\left[\frac{P_r^2}{P_r^2 - R_r^2} \right]^n = 4.434$

Absolute Open Flow	9,750 Mcfd @ 15.025	Angle of Slope θ	50.5	Slope, n	.930
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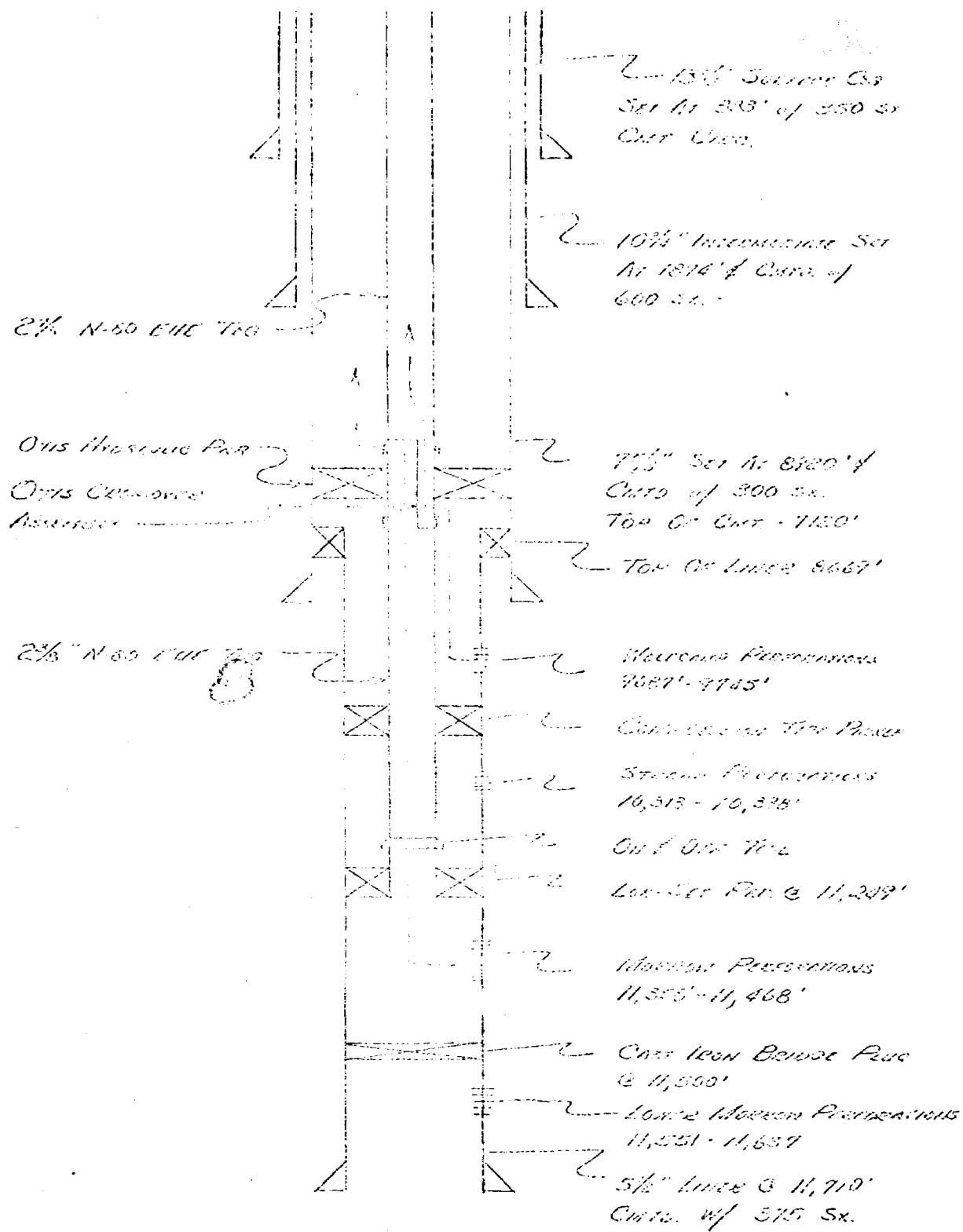
Remarks: Bottom hole pressures taken w/Amorada RPG-3 pressure element.
Well shut in 64 hrs. @ start of open flow.

Approved By Commission:	Conducted By: Chas. A. Lutz	Calculated By: Chas. A. Lutz	Checked By:
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Beacon Pipe, Conn

Under Main Line No 2

West Division



NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APPLICATION FOR MULTIPLE COMPLETION

Form C-107
5-1-61

Operator Belco Petroleum Corporation		County Eddy	Date 1-10-73
Address 2000 Wilco Building, Midland, Texas		Lease Union Mead Com	Well No. 2
Location of Well N	Section 4	Township 22-S	Range 27-E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO XX
2. If answer is yes, identify one such instance: Order No. _____; Operator Lease, and Well No.: _____

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Wolfcamp		Morrow
b. Top and Bottom of Pay Section (Perforations)	9687' to 9745'		11,352' to 11,468'
c. Type of production (Oil or Gas)	Gas		gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

4. The following are attached. (Please check YES or NO)

- | | | |
|-------------------------------------|-------------------------------------|---|
| Yes | No | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.* |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.) |

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Union Oil Company, 300 Security National Bank Building, Roswell, New Mexico 88201

Pennzoil United, Inc., Drawer 1828, Midland, Texas 79701

David J. Sorenson, J. P. White Building, Roswell, New Mexico 88201

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES XX NO _____. If answer is yes, give date of such notification **1-10-73**.

CERTIFICATE: I, the undersigned, state that I am the **District Engineer** of the **Belco Petroleum Corporation** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.


Glenn Cope Signature

*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

Balco Petr Corp.

James Ranch Unit Well #3

Los Medanos J 1-23S 30E Eddy

dual comp

gas from Strawn
Morrison

parallel tubing

Union Mead #1

H 8-22S-27E Eddy

pk 11050

Strawn & q

Morrison & q

Union Mead Com #2

N 4 22 27 Eby

Straw
Morrow