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REPRODUCTION OF RECO

Case Number

4902

Application  
Transcripts.

Small Exhibits

ETC.

dearnley, meier & mc cormick

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1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

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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 a dual completion,  
Eddy County, New Mexico

Case No. 4902

BEFORE: Richard L. Stamets

TRANSCRIPT OF RECORD

dearnley, meier &amp; mc cormick

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1 MR. STAMETS: Call the next case 4902.

2 MR. CARR: Case 4902, application of Belco Petroleum  
3 Corporation for a dual completion, Eddy County, New Mexico.

4 MR. KELLAHIN: Jason Kellahin, Kellahin and Fox,  
5 Santa Fe, appearing for the applicant. May the record show  
6 that Mr. Cope is the witness, and he has been sworn.

7 MR. STAMETS: It will so show. You may proceed.

8 EDWARD GLENN COPE

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

11 DIRECT EXAMINATION

12 BY MR. KELLAHIN

13 Q Would you state your name, please?

14 A My name is Edward Glenn Cope.

15 Q You are the same Mr. Cope who testified in the  
16 preceeding case and whose qualifications were accepted?

17 A Yes.

18 Q Mr. Cope, are you familiar with the application of Belco  
19 Petroleum Corporation in Case 4902?

20 A Yes, I am.

21 Q Briefly, what is proposed by the applicant in this case?

22 A We are requesting permission to dually complete the  
23 Belco Petroleum Corporation James Ranch Unit Well No. 3  
24 and Unit J of Section 1, Township 23 South, Range 30  
25 East, Eddy County, New Mexico. Our Exhibit 1 outlines

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- 1 the zones that we are requesting permission to dually  
2 complete the well in, which are the Strawn zone and the  
3 Morrow zone; and it gives a list of the offset  
4 operators.
- 5 Q Your Exhibit No. 1 is the application for dual completion  
6 on the Commission's Form 207?
- 7 A 107.
- 8 Q Form 107?
- 9 A Yes, sir.
- 10 Q Now, turning to what has been marked as Exhibit No. 2,  
11 would you identify that exhibit?
- 12 A Exhibit No. 2 is a plat.
- 13 (Whereupon, a discussion was held off the record.)
- 14 Q You were discussing Exhibit No. 2. Would you continue,  
15 please?
- 16 A Yes, sir. Exhibit No. 2 is just a plat of the  
17 surrounding area showing the subject well, the Belco  
18 Petroleum Corporation James Ranch Unit No. 3, and also  
19 the Shell James Ranch Unit No. 1.
- 20 Q What formation is the No. 1 well completed in?
- 21 A The No. 1 well is completed in the Atoka sand.
- 22 Q And that's not involved in your present application?
- 23 A That is correct.
- 24 Q Are there any other wells in the area completed in  
25 either the Morrow or the Strawn?

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1 A No, sir. There are not.

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

4 A Exhibit No. 3 has the multipoint back-pressure test for  
5 gas wells which is the form C-122.

6 MR. STAMETS: I believe my Exhibit 3 is a diagramatic  
7 sketch.

8 MR. KELLAHIN: It's the diagramatic sketch.

9 THE WITNESS: Pardon me.

10 A Exhibit No. 3 is a diagramatic sketch of our James Ranch  
11 Unit Well No. 3 which is a complete diagram of the  
12 well illustrating the different strings of casing run in  
13 the well, the volumes of cement used, the types of this  
14 cement, the various perforations, and a diagram of the  
15 downhole equipment in the subject well at this time.

16 Q What kind of packer are you using in this well?

17 A The lower packer at 13,750 feet is a permanent packer,  
18 Model D Packer. Shall I continue?

19 Q Yes.

20 A Immediately above the packer, the Model D Packer, is a  
21 Packer Model L sliding sleeve; and you will notice that  
22 there are Atoka perforations from 12,998 to 13,005.  
23 Then, the next packer above the Atoka perforations is a  
24 Baker Hydrostatic Packer set at 12,847 feet; and above  
25 this packer, there is a Baker Model L sleeve. And at

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1 12,731 to 12,773 are the Strawn perforations. It is  
2 this zone which we wish perforation to dually complete  
3 the well in.

4 Q You do not propose to complete the well in the Atoka at  
5 this time; is that correct?

6 A Yes, sir. That is correct.

7 Q What is the purpose of the sliding sleeve packer again?

8 A Later in the life of the well, should we so desire to  
9 produce that zone, we would possibly want, desire to set  
10 a plug in the Baker "E R" Receptacle on top of the  
11 packer and open the sleeve and produce that zone.

12 Q Now, refer to what has been marked as Exhibit No. 4,  
13 would you identify that exhibit?

14 A Yes, sir. Exhibit No. 4 is the New Mexico Oil  
15 Conservation Commission Form C-122 which is a multipoint  
16 back-pressure test for the Strawn zone in the subject  
17 well.

18 Q Do you have a multipoint back-pressure to the Morrow  
19 zone?

20 A The multipoint back-pressure test to the Morrow zone  
21 has previously been submitted to the Oil Conservation  
22 Commission when we requested permission to produce the  
23 Morrow.

24 Q Was that filed with the Artesia office of the  
25 Commission?

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- 1 A Yes, sir. It was. We originally completed this well  
2 as a single completion in the Morrow zone.
- 3 Q At that time, did you also file a log of the well with  
4 the Artesia office of the Commission?
- 5 A Yes, we have.
- 6 Q What is the pressure differential between the two zones  
7 in this well?
- 8 A Sir, I can't answer that question at this time. I, of  
9 course, have the bottomhole pressure in the Strawn here  
10 before me, on the Form C-122; but I do not have that  
11 pressure information for the Morrow with me at this  
12 time.
- 13 Q In your opinion, would it be a large differential or a  
14 small or have you any idea?
- 15 A I think that the differential would be large in this  
16 case.
- 17 Q In your opinion, would the Baker Model D packer you  
18 propose to use in your dual completion effectively  
19 separate the two zones?
- 20 A Yes, sir.
- 21 Q And have you produced the Morrow subsequent to the time  
22 you made the dual completion?
- 23 A Yes, we have.
- 24 Q Do you have any leakage from the packer?
- 25 A No, sir.

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1 Q No indication of it?

2 A That's right.

3 Q Have you run your packer leakage test on this well yet?

4 A Yes, we have.

5 Q Has it been filed with the Commission?

6 A No, sir. It has not.

7 Q Would you send a copy of that packer leakage test to the

8 Oil Commission?

9 A Yes, sir. We will.

10 Q Were Exhibits 1 through 4 prepared by you or under your

11 supervision?

12 A Yes, sir. They were prepared under my supervision.

13 MR. KELLAHIN: At this time, I'd like to offer into

14 evidence Exhibits 1 through 4 inclusive.

15 MR. STAMETS: Without objection, Exhibits 1 through

16 4 will be admitted into evidence.

17 MR. KELLAHIN: That's all I have on Direct, Mr.

18 Stamets.

19 CROSS EXAMINATION

20 BY MR. STAMETS:

21 Q Mr. Cope, is the Morrow producing any liquids?

22 A No, sir. It is dry gas.

Q Okay. If my calculations are right, the Strawn will

take about twenty barrels per million?

A That is correct, approximately.

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- 1 Q And do you anticipate any problems lifting this volume  
2 of liquids from this depth?
- 3 A No, sir. We have tested this well to determine whether  
4 we should or should not run two strings of tubing; and  
5 we feel that it's not necessary for us to go to this  
6 extra expense. These wells are very expensive wells;  
7 and if you are familiar with the cost of this extra  
8 equipment, you try to produce these wells most efficiently.
- 9 Q What would it cost approximately to run another string of  
10 tubing in this well?
- 11 A At this time, it would cost to run another string of  
12 tubing, we would have to kill the respective zones which  
13 would require fourteen pound mud and probably cost  
14 somewhere in the vicinity of eighty or ninety thousand  
15 dollars total.
- 16 Q The Atoka perforations at the present time are just  
17 blanked over behind the sliding sleeve?
- 18 A Yes, sir, they are.
- 19 Q Does this make any appreciable amount of gas to test?
- 20 A It was a commercial zone.
- 21 Q It was commercial?
- 22 A Right.
- 23 Q Does Belco intend to deplete one of these other zones,  
24 deplete the Morrow and then open both?
- 25 A Possibly, should we so desire.

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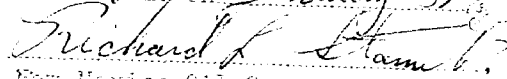
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1 MR. STAMETS: Any other questions of the witness?  
2 If not, he may be excused, and the case will be taken under  
3 advisement. The hearing is adjourned.  
4

5 STATE OF NEW MEXICO )  
6 ) ss  
7 COUNTY OF BERNALILLO)

8 I, JANET RUSSELL, a Notary Public, in and for the  
9 County of Bernalillo, State of New Mexico do hereby certify  
10 that the foregoing and attached Transcript of Hearing before  
11 the New Mexico Oil Conservation Commission was reported by me;  
12 and that the same is a true and correct record of the said  
13 proceedings to the best of my knowledge, skill and ability.  
14

15   
16 NOTARY PUBLIC  
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22 I do hereby certify that the foregoing is  
23 a true and correct record of the proceedings in  
24 the Examiner hearing of case No. 4902  
25 heard by me on January 31, 1973  
  
Examiner  
New Mexico Oil Conservation Commission

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## WITNESS

EDWARD GLENN COPE

Direct Examination by Mr. Kellahin

3

Cross Examination by Mr. Stamets

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E X H I B I T SADMITTEDOFFERED

Exhibit No. 1 - Outline

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Exhibit No. 2 - Photo

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Exhibit No. 3 - Diagramatic sketch

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Exhibit No. 4 - Form C-122

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# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

**P. O. BOX 2088 • SANTA FE**

87501

**GOVERNOR  
BRUCE KING  
CHAIRMAN**

**LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER**

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

**February 14, 1973**

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

Re: Case No. 4902

Order No. R-4479

**Applicant:**

Belco Petroleum Corp.

**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. 4902  
Order No. 3-4479

APPLICATION OF BELCO PETROLEUM  
CORPORATION FOR A DUAL COMPLETION,  
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 14th day of February, 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 James Ranch Unit Well No. 3,  
located in Unit J of Section 1, Township 23 South, Range 30 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 mechanics of the proposed dual completion are  
feasible and in accord with good conservation practices.
- (4) That approval of the subject application will prevent  
waste and protect correlative rights.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Belco Petroleum Corporation, is  
hereby authorized to complete its James Ranch Unit Well No. 3,  
located in Unit J of Section 1, Township 23 South, Range 30  
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 tubing, respec-  
tively.

-2-

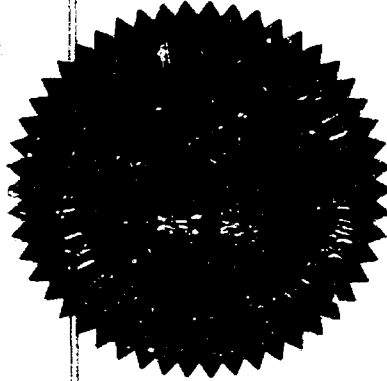
Case No. 4902  
Order No. R-4479

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

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

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

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



STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Bruce King*  
BRUCE KING, Chairman

*Alex J. Armiño*  
ALEX J. ARMIÑO, Member

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

S E A L

dr/

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 31, 1973

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

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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 24 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,

(Case 4902 continued from page 1)

New Mexico, in such a manner as to produce gas from the Strawn and Morrow formations, Los Medanos Field Area, through parallel strings of tubing.

Docket No. 4-73

DOCKET: REGULAR HEARING - WEDNESDAY - FEBRUARY 7, 1973

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

CASE 4796: (Continued from the November 21, 1972 Regular Hearing)

Application of Michael P. Grace II and Corinne Grace for capacity allowable, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an exception to the General Rules and Regulations governing the prorated gas pools of Southeast New Mexico, promulgated under Order No. R-1670, as amended, to produce their City of Carlsbad "D" Well No. 1, located in Unit O of Section 25, Township 22 South, Range 26 East, South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico, at full capacity.

(THIS CASE WILL BE CONTINUED TO AN INDEFINITE DATE AND WILL BE READVERTISED BEFORE BEING HEARD.)

CASE 4869: (De Novo)

Application of Claude C. Kennedy for the amendment of Order No. R-4263, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4263 to prohibit the transfer of allowable to any well located closer than 1320 feet from the outer boundary of the Lone Pine Dakota "D" Unit Area, Lone Pine-Dakota "D" Pool, McKinley County, New Mexico. Upon application of Claude C. Kennedy, this case will be heard de novo under the provisions of Rule 1220.

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

Form C-107  
5-1-61

Operator <b>Belco Petroleum Corporation</b>		County <b>Eddy</b>	Date <b>1-10-73</b>
Address <b>2000 Wilco Building, Midland, Texas</b>		Lease <b>James Ranch Unit</b>	Well No. <b>3</b>
Location of Well <b>J</b>	Section <b>1</b>	Township <b>23-S</b>	Range <b>30-E</b>

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	<b>Strawn</b>		<b>Moscow</b>
b. Top and Bottom of Pay Section (Perforations)	<b>12,731' - 12,773'</b>		<b>13,835' - 14,256'</b>
c. Type of production (Oil or Gas)	<b>Gas</b>		<b>Gas</b>
d. Method of Production (Flowing or Artificial Lift)	<b>Flowing</b>		<b>Flowing</b>

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.

**Shell Oil Company, Box 1509, Midland, Texas 79701**

**Bass Enterprises Production Company, Fort Worth National Bank Building, Fort Worth, Texas 76102**

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*  
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.

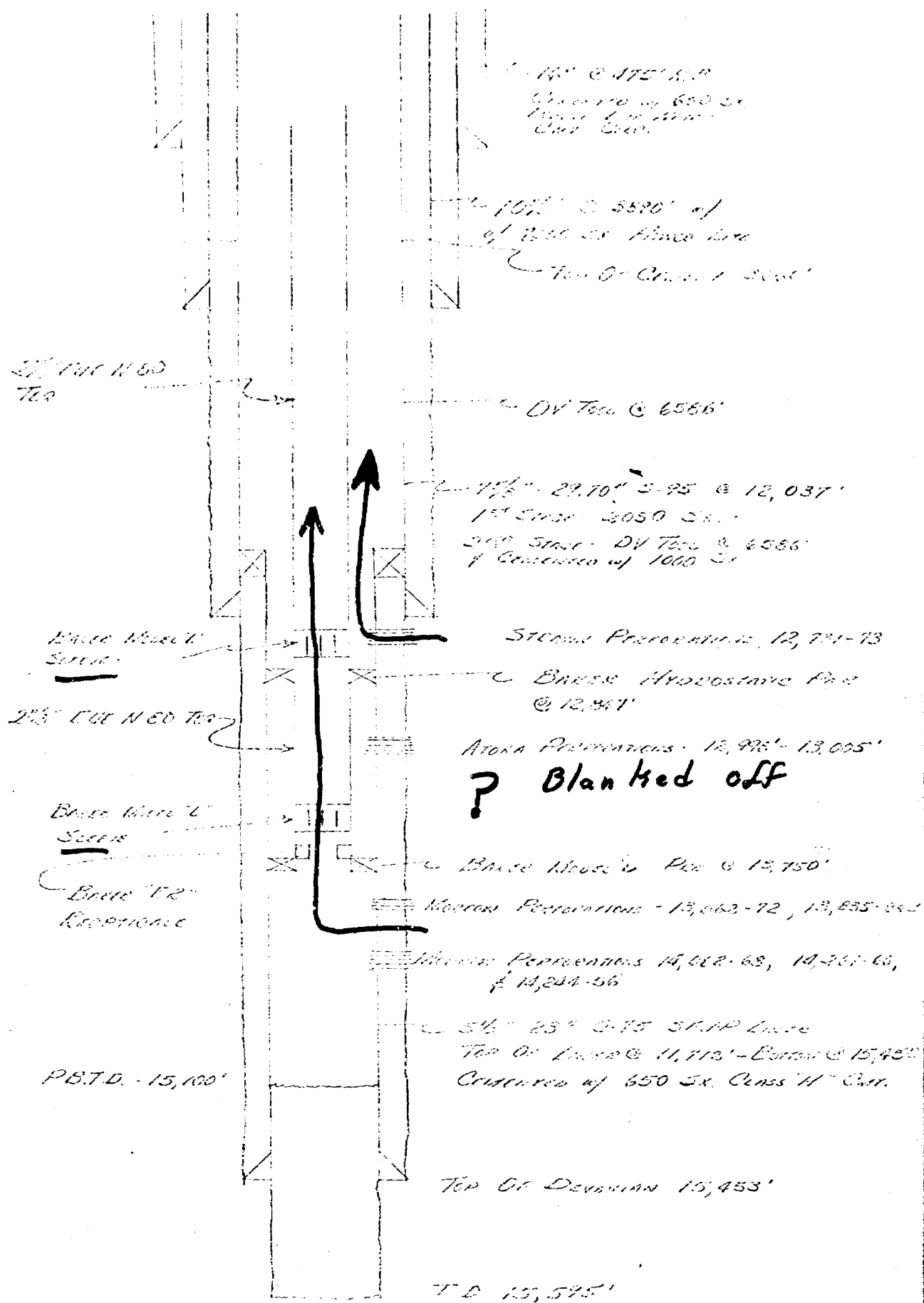
NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

Rich & Bass J. Legg 27	26	25	30	29
	22	30	22	31
34	35	36	31	32
		Shell J. James Rich Unit *		
3	2	1	6	5
		Belco 3-James Rich Unit ⊗		
Wills J. Montgomery 10	11	12	7	8
	23	30	23	31
15	14	13	18	17

**BELCO PETROLEUM CORP.**  
MIDLAND DISTRICT

BELCO PETROLEUM CORPORATION  
JAMES RANCH UNIT WELL NO. 3

Brown Hill Cove  
James Raven Unit No. 5  
Blue Diamond



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

**RECEIVED**

Form C-122  
Revised 9-1-65  
DEC 14 1972

MIDLAND OFFICE

Type Test: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special						Test Date: 12-8-72	
Company: Belco Petroleum Corporation				Connection: Natural Gas Pipeline Company of America			
Pool: Wildcat				Formation: Strawn			
Completion Date: 3-7-72		Total Depth: 15,595		Plug Back TD: 15,200		Elevation: 3288 GR	
Csg. Size: 5 1/2		Wt.:		Set At: 15,434		Perforations: From 12,998 To 13,005	
Tbg. Size: 2 7/8		Wt.:		Set At: 13,600		Perforations: From 12,731 To 12,773	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: <del>XXXXXX</del> Retrievable						County: Eddy	
Single-Annulus Dual Completion: Bridge Plug @ 12,847'						State: New Mexico	
Producing Thru: Tubing		Reservoir Temp. °F: 186 @ 12500		Mean Annual Temp. °F: 70		Baro. Press. - P <sub>a</sub> : 13.2	
L: 12752		H: 12752		G <sub>g</sub> : 0.663		Prover: Meter Run: X	
				% CO <sub>2</sub> :		% N <sub>2</sub> :	
				% H <sub>2</sub> S:		Taps:	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							6287		Pkr.		
1.	4"	X	1"	125	7	58	6264	70	"		1/2 hr.
2.	4"	X	1"	360	36	64	6194	70	"		1/2 hr.
3.	4"	X	1"	470	64	76	6107	70	"		1/2 hr.
4.	4"	X	1"	640	82	82	5999	70	"		1/2 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.753	31.1	138.2	1.002	1.228	1.015	184.6
2	4.753	106.2	313.2	0.9962	1.228	1.034	638.5
3	4.753	163.6	418.2	0.9850	1.228	1.040	978.2
4	4.753	231.4	653.2	0.9795	1.228	1.063	1406.3
5							

NO.	P <sub>t</sub>	Temp. °R	T <sub>r</sub>	Z	Gas Liquid Hydrocarbon Ratio	46.58	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	54.1	Deg.
2.	Used Simplified				Specific Gravity Separator Gas	0.663	XXXXXX
3.	Supercompressibility				Specific Gravity Flowing Fluid	XXXXX	
4.	Tables				Critical Pressure	670	P.S.I.A.
5.					Critical Temperature	378	R

P <sub>f</sub> 8165.2 P <sub>f2</sub> 66670				
NO.	P <sub>t</sub> <sup>2</sup>	P <sub>s</sub>	P <sub>s2</sub>	P <sub>f2</sub> -P <sub>s2</sub>
1		8142.2	66295	375
2		8076.2	65225	1445
3		8011.2	64179	2491
4		7932.2	62920	3750
5				

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

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

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

Absolute Open Flow	18,000	Mcf/d @ 15.025	Angle of Slope @ 49° 56'	Slope, n 0.87376
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Remarks: BHP measured with Amerada RPG-3 gauge.

Approved By Commission:	Conducted By: Tefteller, Inc.	Calculated By: F. Tefteller	Checked By:
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DRAFT

dr/

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. 4902

Order No. R-4479

APPLICATION OF BELCO PETROLEUM CORPORATION  
FOR A DUAL COMPLETION, 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, 1963, at Santa Fe, New Mexico, before Examiner  
Richard L. Stamets.

NOW, on this day of February, 1963, 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 James Ranch Unit Well No. 3

~~Well No. 3~~, located in Unit J of Section 1, Township

23 South, Range 30 East, ~~North~~ ~~West~~ County, New

Mexico, as a dual completion (completion) to produce gas

from the ~~undesignated Strawn and Morrow gas pools~~  
~~Los Medanos~~ ~~well~~ through ~~parallel the~~  
~~strings of tubing.~~

casing - tubing annulus and  
through tubing, respectively.

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

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Belco Petroleum Corporation, is hereby authorized to complete its James Ranch Unit Well No. 3 ~~Well No. \_\_\_\_\_~~, located in Unit J of Section 1, Township 23 ~~North~~ <sup>South</sup>, Range 30 ~~West~~ <sup>East</sup> NMPM, Eddy County, New Mexico, as a dual completion <sup>(conventional)</sup> ~~(combination)~~ to produce gas <sup>x011x</sup> ~~(tubingless)~~ from undesignated Strawn and Morrow ~~the Los Medanos~~ Pools through parallel strings ~~of tubing~~. The casing-tubing annulus and tubing, respectively.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage ~~zone segregation~~ tests upon completion and annually thereafter during the Annual Shut-In Pressure ~~Gas Oil Ratio~~ Test Period for the Strawn and Morrow ~~Los Medanos~~ Pools. Deliverability

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

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