Application Transcripts

Small Exhibits

EXAMINER HEARING

IN THE MATTER OF:

Application of Dallas McCasland for) approval of infill drilling, Lea) County, New Mexico.

CASE 6568

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

SALLY WALTON BOYC
CERTIFIED SHORTHAND REPORTE
3010 Plaza Blanca (605) 411-246
Santa Pe. New Mexico 31501

6

10

11

12

13

14

15

16

17

18

19

20

22

24

I N D E X

DALLAS McCASLAND

Direct Examination by Mr. Kellahin 3

Cross Examination by Mr. Nutter 12

EXHIBITS

Applicant Exhibit C, Cross Section 4

Applicant Exhibit A-1, Document 6

Applicant Exhibit A, List 8

Applicant Exhibit B, Graph 9

Applicant Exhibit D, List 9

Applicant Exhibit E, Curve 10

Applicant Exhibit F, Tabulation 11

SALLY WALTON BUYD
ERIFIED SHORTHAND REPORTER
10 Plaza Blanca (605) 471-2462
Santa Fe, New MoxIco 87501

MR. NUTTER: We'll call next Case Number

MR. PADILLA: Application of Dallas

McCasland for approval of infill drilling in Lea County,

New Mexico.

MR. KELLAHIN: Tom Kellahin of Kellahin and Kellahin, Santa Fe, New Mexico, appearing on behalf of the applicant, and I have one witness to be sworn.

(Witness sworn.)

DALLAS MCCASLAND

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

6568.

- Q. Would you please state your name and occupation?
- A. Dallas McCasland, from Eunice, New Mexico. Self employed.
- Q. Mr. McCasland, have you previously testified before the Oil Conservation Division of New Mexico and had your qualifications as an expert witness accepted and made a matter of record?

Application Transcripts

Small Exhibits

11

13

14

15 16

17

18 19

20

22

23

25

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico
13 June 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Dallas McCasland for) approval of infill drilling, Lea) County, New Mexico.

CASE 6568

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

ILLY WALTON BOY

INDEX

DALLAS McCASLAND

Direct Examination by Mr. Kellahin

Cross Examination by Mr. Nutter

EXHIBITS

Applicant	Exhibit	С,	Cross Section	4
Applicant	Exhibit	A-1,	Document	6
Applicant	Exhibit	A, L	ist	8
Applicant	Exhibit	В, G	raph	9
Applicant	Exhibit	D, L	ist	9
Applicant	Exhibit	Е, С	urve	10
Applicant	Exhibit	F, T	abulation	11

11

12

13

14

15

16

17

18

20

21

22

23

6568.

MR. PADILLA: Application of Dallas McCasland for approval of infill drilling in Lea County, New Mexico.

MR. KELLAHIN: Tom Kellahin of Kellahin and Kellahin, Santa Fe, New Mexico, appearing on behalf of the applicant, and I have one witness to be sworn.

(Witness sworn.)

DALLAS McCASLAND

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Would you please state your name and occupation?

Dallas McCasland, from Eunice, New Mexico. Self employed.

Mr. McCasland, have you previously testified before the Oil Conservation Division of New Mexico and had your qualifications as an expert witness accepted and made a matter of record?

25

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. I have.

Q And have you had prepared under your direction a number of exhibits with regards to your application in this case?

A. I have.

Q Have you made a study of the facts surrounding this application?

A. Yes.

 $$\operatorname{MR.}$$ KELLAHIN: We tender Mr. McCasland as an expert witness.

MR. NUTTER: Mr. McCasland is qualified.

Q (Mr. Kellahin continuing.) Would you please refer to -- I think we're going to need to look at the cross section first, Mr. McCasland. If you'll look at that, it has been labeled Applicant Exhibit Number C, letter C, and simply turn -- you don't have to unfold the entire exhibit -- if you'll simply turn -- refer to the plat that's located on the -- on the bottom of the cross section, and would you describe for me the location of the proration unit to be dedicated to this particular well?

A. This would be the southwest quarter of Section 28.

Q. And you're in --

A. 24, 37.

Q. You're in the Jalmat Gas Pool?

25

down, uneconomical to --

	14	
1	λ.	Yes, sir.
2	Q.	And where do you propose to drill your
3	infill well?	
4	A.	I propose to drill the well in the south-
5	east quarter of t	the southwest quarter of Section 28, 24, 37.
6	Q.	What will you call that well?
7	A.	Woolworth No. 4 No. 5.
8	Q.	Do you have a specific footage location
9	for that well?	
10	А.	Well, not with me.
11	Q.	All right. You've not commenced drilling
12	that well, have y	you?
13	A.	No, I have not.
14	Q.	Would you describe what other wells are
15	located on that p	proration unit that produce from the Jal-
16	mat Gas Pool?	·
17	A.	The Well No. 3 was drilled in 1939 with
18	a total depth of	3588 and plugged back in the Jalmat com-
19	pletion to 3240;	perforated from 3006 to 3130, with it
20	come in natural a	at 3,000,075 Mcf a day.
21	Q.	Is that No. 3 Well still producing from
22	the Jalmat Gas Po	001?
3	А.	It is on a steady decline. It's getting

What's its --

24

25

1	А.	keep the water out of it.
2	Q.	What's its current daily production?
3	λ.	It's temporarily abandoned. We plan on
4	maybe putting a	beam pump on it to lift the water it's
5	encountered.	
6	Q.	What has been its total cumulative pro-
7	duction of gas?	
8	A.	3,488,736 Mcf.
9	Q.	That information on this well is indicated
10	on your Exhibit	A-1, contained in the pamphlet of exhibits?
11	А.	Yes.
12	Q.	Now, you indicated that there was another
13	well in this pro	ration unit that had also produced at one
14	time from the Ja	lmat Gas Pool.
15	А.	Yes, it's Well No. 4 in Unit L.
16	Q.	What is the current status of that well?
17	A.	It is temporarily abandoned. The records
18	are vague on it;	it was drilled in 1939. It shows to be
19	shot inside the	pipe with 100 quarts of nitroglycerin,
20	2980 to 3085, an	d that was hard for me to believe, and I
21	attempted to go	back in it, and the records proved to be
22	correct. I spen	t about \$30,000 trying to drill iron out

Q. Do you still drill Jalmat gas wells with nitroglycerin?

and I could never get down on it.

A. No, sir. This was treated with shot, nitroglycerin, 100 quarts left in.

Q. When did that last -- when did that well stop producing?

A. I believe '65, wasn't it, last production.
'62, 1962, May, '62.

Q Okay. In your opinion, Mr. McCasland, is there gas underlying this particular proration unit that can be produced from the Jalmat Gas Pool that has not been recovered from any previously producing well?

A. Yes, I think so.

Q. In your opinion will the proposed well produce gas that had not otherwise been produced from this proration unit?

A. I do. In fact, this No. 3 could probably be -- it was -- it had never been treated, but it would be -- in my experience, these old wells back then, the cement job was very poor, and before we'd attempt to probably frac it, require plugging back and re-cement and go from there on it, which would be quite expensive.

Q. In your opinion is the Woolworth No. 5 Well, the subject well, necessary to effectively and efficiently drain this particular proration unit?

A Yes, I think it's necessary.

Q. Who is Mr. Zake Monroe?

	Α.	lle	is a	consu	1tar	nt ir	n Mid	land	, Т	'ex	as,
and	he would	be here	e toda	y but	he	was	tied	up	on	a	well
in C	zona and	could :	not be	here							

- Q You retained him under your direction and supervision to prepare certain reports for you on this area with regards to this well?
 - A. Yes, sir.
- Q. And is he a petroleum engineer or a geologist?
 - A. Yes, he is.
 - Q. Which one?
 - A. Geologist.
- Q. Would you refer to the information contained in that packet that is labeled Exhibit A and indicate for us what information is contained on that exhibit?
- A. Well, it has the 72-hour shut-in pressure, which was on the decline. Well No. 3, 1977, was 143 pounds 72-hour shut-in pressure, which rule-of-thumb, with the water accumulating in the tubing you go one pound of pressure lift two barrels -- two feet of water.
 - 0. How much water is that well making?
 - A. The No. 3 Well?
 - Q. Yes.
- A. It doesn't make very little but you got to continue to keep it coming or it will get above your

SALLY WALTON BOYD CENTIFIED SHORTHAND REPORTER 3020 Pluza Blanca (606) 411-2462 Santa Pro, New Mexico 87501

1

2

5

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

hydrostatic where it's unable to lift it.

Will you refer to Exhibit Number B and explain what information is contained on that exhibit?

This exhibit shows the decline on the Woolworth 3. I acquired the lease in the latter part of '76, which had been shut in since the early part of '75.

What did you do to the Woolworth No. 3 Well to obtain the production that's indicated on the graph in late '76?

Well, I spent some time with a swabbing unit getting the water out and eventually put a plunger lift in it to keep the water coming. The pressure was greater than it is now but a plunger lift is no longer feasible.

In your opinion can you continue to use the Woolworth No. 3 Well to drain this proration unit of the Jalmat gas?

No, I don't think so.

Would you refer to Exhibit Number D and identify it?

This shows the ARCO Harrison No. 1 and also No. 6, the cumulative production of gas and also the shut-in pressure.

Now where are those wells located in reference to your wells?

			Λ.	In	Section	29	and	24.	29	will	be	north
of	me,	Ι	believe.	•								

Q Those are -- those are the west offsets to --

A. Yes.

Q -- your location, aren't they?

A. Yes, they are.

Q And would you look at Exhibit E now and describe what that is?

A. This is a curve on the ARCO -- southwest quarter of Section 29, the Harrison No. 1, and also No. 6.

Q. Can you express an opinion with regards to comparing the ARCO Harrison wells to the wells on your proration unit?

A. Well, they were drilled at a later date, which indicates they're better wells and they still have considerable reserves left, I'd say.

Q. In your opinion can you conclude from your study that based upon the information contained in the ARCO Harrison analysis that there is still substantial Jalmat gas to be recovered under your particular proration unit?

A. Yes.

Q. And do you have an opinion with regards

3

5

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

to what that anticipated additional recovery figure might be for the Woolworth No. 5 Well?

- A. I have 175-million Mcf recovery.
- Q Do you expect that to be the total ultimate recovery or is that a minimum figure?
 - A. That's a minimum. I really expect more.
- Q. What is the depth of a well drilled in the Jalmat Gas Pool?
 - A. I intend to go 3200 total depth.
 - Q. And what do those wells generally cost?
- A. Approximately \$125,000 completed, a flowing well.
- Q The last exhibit I'd like to have you identify is Exhibit F in the package of exhibits, and simply indicate to me what that information is.
- A. It's the shut-in pressures on the ARCO
 Harrison No. 2-A, Continental's Jack A No. 8, Woolworth 4,
 Amoco's Woolworth 4, Shenandoah Oil Woolworth No. 3, Reading
 and Bates Hunble L State 3, El Paso's Shell Black No. 2,
 cumulative production and the shut-in pressures.
- Q Were Exhibits A through F compiled under your direction and supervision?
 - A. Yes.
- Q. In your opinion, Mr. McCasland, will approval of your application be in the best interests of

conservation, the prevention of waste, and the protection of correlative rights?

- A. Yes, it will.
- Q. And in your opinion is the subject well necessary in order to effectively and efficiently drain this particular proration unit of the Jalmat gas?

A. Yes.

MR. KELLAHIN: That concludes my examination of Mr. McCasland. I move the introduction of Exhibits A through F.

MR. NUTTER: Applicant's Exhibits A through F will be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Mr. McCasland, I'm having a hard time spotting these wells on these little plats on this cross section.

Now, I've got the No. 3 here on your lease. You also mentioned the No. 4. Now where is that No. 4 Well?

A. The No. 4 is north of No. 3. It has the plug indicated in the --

Q. Okay, that's the No. 4 Well. Now, the No. 3 was originally drilled to the underlying oil pay, is

SALLY WALTON BOY! CERTIFIED SHORTHAND REPORTE 8010 Plaza Blanca (606) 471-24 Santa Fe, New Mexico 57501

that right?

3

5

6

7

8

9

10

11

12

14

15

16

17

18

19

20

21

22

23

24

25

A. Yes. It was originally drilled to the Langlie Mattix and plugged back to the Jalmat Gas.

Q. It was drilled in 1939 and when was it plugged back?

A. 1947, September of '47.

Q And this cumulative production that you gave us, this 3-billion, 3.4-billion cubic feet, is from the Jalmat.

A. I would say it is, yes, sir.

And then the well was shut in by the previous owner back in '75. You took the well over in late '76, swabbed it, put in a plunger lift and restored it to production.

A. Yes, sir.

Q Now it's getting to where the plunger lift doesn't work any more --

A. Yes, sir.

Q. -- and you're going to have to put a beam pump on it to get the water out.

A. That's true.

Q Now what about the No. 4 Well? Has it been plugged and abandoned?

A. No, sir, I still have hopes to do something with it. I don't know what yet.

But it hasn't produced since way back --

Well, no, sir. Mr. Lewis Burleson has a

2	A. No	o, sir.
3	ρ	in '62.
4	A. No	o, sir, it hasn't.
5	A1	ter I got through with my work on it, I
6	tested it, and it w	vas I think it's test run 50 Mcf for
7	30 days.	
8	Q. UI	-huh. Now this production that's shown
9	on Exhibit B of you	r brochure is Jalmat Gas well production
0	from the well.	
11	A. Ye	es.
12	Q. OF	ay. Then we go to the Exhibits E, D
3	and E, and I'm havi	ng a hard time finding these ARCO wells.
4	Now where would tha	t ARCO Harrison 1 be?
5	A. It	would be the this map isn't very
6	plain. This ARCO v	ould be in the northwest quarter of
7	Section 29.	
8	Q. Tì	aat's way up there in the
9	A. Ye	es, I think so.
0	Q. O}	ay. And then the No. 6, is that the
1	well that's in the	southeast of the southwest of 29?
2	A. I	think so, yes, sir.
3	Q. Ai	re those the nearest Jalmat gas wells to
4	your well?	

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

well back in Section 33 in the -- I believe that will be in the southwest quarter of Section 33.

Q. Oh, yes. Well, why -- why did you choose these ARCO wells, or why did the consultant that you had working for you choose these ARCO wells to put on this exhibit?

A. Well, I really don't know, unless they were just readily available or --

Q. Now you estimated for Mr. Kellahin that you'ld recover 175-million Mcf from this lease. I think you meant --

A. On the new well.

Q. -- 175-million cubic feet.

A. Yes, sir. Yes, sir, that's correct.

Q. And that would be from this new proposed No. 5 Well.

A. Yes, sir.

Q. And do you intend to install that pump on the No. 3 and restore it to production, keep it on production?

A. Yes, sir.

Q. So you'll have the dual dedication of this 160 to the two wells, then?

A. Well, if the new well does not make the allowable, which is doubtful.

Q.	But if it did make the allowable you
would	
A.	Yes, sir, I would
Ũ	leave the No. 3 resting for awhile.
А.	either I'd either plug them or

Q. Okay.

leave them resting, yes, sir.

MR. NUTTER: Are there any further questions of Mr. McCasland? He may be excused.

Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: Not in this case.

MR. NUTTER: Does anyone have anything they wish to offer in Case Number 6568?

We'll take the case under advisement.

(Hearing concluded.)

REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6568

Oil Conservation Division , Examiner

ş. . j

SHORTHAND REPORTER Blanca (605) 471-2463 e, New Mexico 67501

10

11

12

13

14

15

16

17

18

19

STATE OF NEW MUNICO ENERGY AND MINERALS DEPARTMENT Oil Conservation Division State Land Office Building Scata Pe, New Mexico 13 June 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Dallas McCasland for) approval of infill drilling, Lea) County, New Mexico.

CASE 6568

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

22

23

24

INTTY

DALLAS McCASLAND

Direct Examination by Mr. Kellahin

Cross Examination by Mr. Nutter

EXHIBITS

Applicant Exhibit C, Cross Section Applicant, Exhibit A-1, Document Applicant Exhibit N, List Applicant Exhibit B, Graph Applicant Exhibit D, List Applicant Exhibit E, Curve Applicant Exhibit F, Tabulation

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. NUTTER: We'll call next Case Number

MR. PADILLA: Application of Dallas
McCasland for approval of infill drilling in Lea County,
New Mexico.

MR. KELLAHIN: Tom Kellahin of Kellahin and Kellahin, Santa Fe, New Mexico, appearing on behalf of the applicant, and I have one witness to be sworn.

(Witness sworn.)

DALLAS MCCASLAND

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELTAHIN:

6568.

Q Would you please state your name and occupation?

A. Dallas McCasland, from Eunice, New Mexico.
Self employed.

Mr. McCasland, have you previously testified before the Oil Conservation Division of New Mexico and had your qualifications as an expert witness accepted and made a matter of record?

2

3

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. Thave.

Q And have you had proposed under your direction a number of exhibits with regards to your application in this case?

L 1 have.

Q. Have you made a study of the facts surrounding this application?

A. Yes.

MR. KELLAHIN: We tender Mr. McCasland as an expert witness.

MR. HUTTER: Mr. McCasland is qualified.

Q. (Mr. Kellahin continuing.) Would you please refer to --- I think we're going to need to look at the cross section first, Mr. McCasland. If you'll look at that, it has been labeled Applicant Exhibit Number C, letter C, and simply turn --- you don't have to unfold the entire exhibit --- if you'll simply turn --- refer to the plat that's located on the --- on the bottom of the cross section, and would you describe for me the location of the proration unit to be dedicated to this particular well?

A This would be the southwest quarter of Section 28.

Q And you're in ---

A 24, 37.

Q You're in the Jalmat Gas Pool?

And where do you propose to drill your

4	A. I propose to drill the well in the south-
5	east quarter of the southwest quarter of Section 28, 24, 37
6	Q What will you call that well?
7	M. Woolworth No. 4 No. 5.
8	Q Do you have a specific footage location
9	for that well?
10	A. Well, not with me.
11	Q All right. You've not commenced drilling
12	that well, have you?
13	M. No, I have not.
14	g Would you describe what other wells are
15	located on that proration unit that produce from the Jal-
16	mat Gas Pool?
17	A. The Well No. 3 was drilled in 1939 with
18	a total depth of 3588 and plugged back in the Jalmat com-
19	pletion to 3240; perforated from 3006 to 3130, with it
20	come in natural at 3,000,075 Mcf a day.
21	Q. Is that No. 3 Well still producing from

infill well?

25

22

23

What's its --

It is on a steady decline. It's getting

the Jalmat Gas Pool?

down, uneconomical to --

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

G.	What's its current daily production?
В.	It's deepowarily abandoned. We plan on
maybe putting a be	cam pump on it to lift the water it's
encountered.	
Q.	What has been its total cumulative pro-
duction of gas?	
λ.	3,488,736 Nof.
Ğ.	That information on this well is indicated
on your Exhibit A	-1, contained in the pamphlet of exhibits?
F.	Yes.
Q.	Now, you indicated that there was another

time from the Jalmat Gas Pool.

Yes, it's Well No. 4 in Unit L.

well in this proration unit that had also produced at one

What is the current status of that well?

- keep the water out of it.

It is temporarily abandoned. The records are vague on it; it was drilled in 1939. It shows to be shot inside the pipe with 100 quarts of nitroglycerin, 2980 to 3085, and that was hard for me to believe, and I attempted to go back in it, and the records proved to be correct. I spent about \$30,000 trying to drill iron out and I could never get down on it.

Do you still drill Jalmat gas wells with nitroglycerin?

\mathcal{N}_{i}	20,000	Million At the	troated	with shot	,
nitroglycerin,	100 quarts	rest ta.			

- t believe '65, wasn't it, last production.'62, 1962, May, '62.
- Okay. In your opinion, Mr. McCasland, is there gas underlying this particular proration unit that can be produced from the Jalmat Gas Pool that has not been recovered from any previously producing well?
 - A Yes, I think so.
- On your opinion will the proposed well produce gas that had not otherwise been produced from this proration unit?
- A I do. In fact, this No. 3 could probably be -- it was -- it had never been treated, but it would be -- in my experience, these old wells back then, the cement job was very poor, and before ve'd attempt to probably frac it, require plugging back and re-cement and go from there on it, which would be quite expensive.
- Q. In your opinion is the Woolworth No. 5 Well, the subject well, necessary to effectively and efficiently drain this particular promation unit?
 - A. Yes, I think it's necessary.
 - Q. Who is Mr. Zake Monroe?

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

		Λ,		प्र	• •	COMB	ulta	osto đị	ા ઝાલ	tand	, ŋ	lax	as,
anđ	he	would	bo	horo	tod.	ay bu	t ha	7.77.7	Stad	up	OH	Э	we 1.1.
in (Ozoi	na and	co	uld no) (1)	a hor	e.						

Nou retained him under your direction and supervision to prepare certain reports for you on this area with regards to this well?

- A Yes, sir.
- Q And is he a petroleum engineer or a geologist?
 - A. Yes, he is.
 - Q Which one?
 - A. Goologist.
- Q Would you refer to the information contained in that packet that is labeled Exhibit A and indicate for us what information is contained on that exhibit?

Mell, it has the 72-hour shut-in pressure, which was on the decline. Well No. 3, 1977, was 143 pounds 72-hour shut-in pressure, which rule-of-thumb, with the water accumulating in the tubing you go one pound of pressure lift two barrels — two feet of water.

- O How much water is that well making?
- A. The No. 3 Well?
- Q Yes.
- A. It doesn't make very little but you got to continue to keep it coming or it will get above your

hydrostatic where it's anable to kill if.

Q. Will you refer to inhibit Number D and explain what information is contained on that exhibit?

Moolworth 3. I acquired the lease in the latter part of '76, which had been shut in since the early part of '75.

Q. What did you do to the Woolworth No. 3

Well to obtain the production that's indicated on the graph
in late '76?

Moll, I spent some time with a swabbing unit getting the water out and eventually put a plunger lift in it to keep the water coming. The pressure was greater than it is now but a plunger lift is no longer feasible.

Q. In your opinion can you continue to use the Woolworth No. 3 Well to drain this proration unit of the Jalmat gas?

A. No, I don't think so.

0 Would you refer to Exhibit Number D and identify it?

A. This shows the ARCO Harrison No. 1 and also No. 6, the cumulative production of gas and also the shut-in pressure.

() Now where are those wells located in reference to your wells?

1	<i>A</i> .	In Section 29 and Mar. 22 will be north
2	of me, I believe	
3	Ű.	Those are those are the west offsets
4	to ····	
5	7.	Yes.
6	Ω.	your location, aren't they?
7	ħ.	Yes, they are.
8	\ddot{o}	and would you look at Exhibit E now and
9	describe what th	
10	λ.	This is a curve on the ARCO southwest
11	quarter of Sect	ion 29, the Harrison No. 1, and also No.
12	6.	
13	Q.	Can you express an opinion with regards
14	to comparing th	e ARCO Harrison wells to the wells on your
15	proration unit?	
16		Well, they were drilled at a later date,
17	which indicates	s they're better wells and they still have
18	considerable re	eserves left, I'd say.
19	Į.	In your opinion can you conclude from
2	o your study tha	t based upon the information contained in
2	the ARCO Harri	son analysis that there is still substantial
2	Jalmat gas to	be radovered under your particular proration
2	vait?	

y, Yos.

O And do you have an opinion with regards

to what that antidipered will tional amony figure might be for the Moolwood to, 5 45112

- A Thave 175 million Mas recovery.
- nate recovery or is that a minimum figure?
 - B. That's a minimum. I really expect more.
- What is the depth of a well drilled in the Jalmat Gas Pool?
 - A I intend to go 3200 total depth.
 - 0 And what do those wells generally cost?
- A. Approximately \$125,000 completed, a flowing well.

The last exhibit I'd like to have you identify is Exhibit F in the package of exhibits, and simply indicate to me what that information is.

Marrison No. 2-A, Continental's Jack A No. 8, Woolworth 4, Amoco's Woolworth 4, Shenandoah Cil Voolworth No. 3, Reading and Dates Humble I State 3, El Paso's Shell Black No. 2, cumulative production and the shut-in pressures.

Q Were Exhibits A through F compiled under your direction and supervision?

y Yes.

o in your opinion, ir. McCasland, will approval of your application be in the best interests of

3

5

6

7

В

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

conservation, the gratuication of wanta, and the protection of correlative rights?

Yes, it Will.

and in your opinion is the subject well necessary in order to effectively and efficiently drain this particular proration unit of the dalmat gas?

> À. Yes.

MR. RELLAMIN: That concludes my examination of Mr. McCasland. I move the introduction of Exhibits A through F.

MR. HUTTER: Applicant's Exhibits A through F will be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Mr. McCasland, I'm having a hard time spotting these wells on these little plats on this cross section.

How, I've got the Mo. 3 here on your lease. You also mentioned the No. 4. Now where is that No. 4 No.11?

The Mo. d is north of Mo. 3. It has the plug indicated in the --

Onay, that's the No. 4 Well. Now, the No. 3 was originally drilled to the underlying oil pay, is

SALLY WALTON BOY(ERTIFIED SHORTHAND REPORT! 010 Plaza Blanca (605) 471-34 Santa Fe, New Mexico 57501

that right?

3

8

11

12

14

15

16

17

18

19

20

21

22

23

24

25

Langlie Mattix and plugged back to the Jalmat das.

Q It was drilled in 1939 and whom was it plugged back?

A. 1947, September of '47.

and this cumulative production that you gave us, this 3-billion, 3.4-billion cubic feet, is from the Jalmat.

A. I would say it is, yes, sir.

previous owner back in '75. You took the well over in late '76, swabbed it, put in a plunger lift and restored it to production.

& Yes, sir.

Now it's getting to where the plunger lift doesn't work any more --

A. Yes, sir.

q — and you're going to have to put a beam pump on it to get the water out.

A. That's true.

n Now what about the No. 4 Well? Has it been plugged and abandoned?

thing with it. I don't know what yet.

nut it twenth profess ? since way back --

2.

your well?

No, si.

(:

ħ.

. - in 102.

No, sir, it hasn't.

I think so, yes, sir.

Are those the nearest Jalmat gas wells to

Wall, no, sir. Mr. Lowis Burleson has a

1

5

22

23

24

well back in Section Divin the the theo that will be in the southwest quantity of section 10.

On, you, well, will a why did you choose

these ARCO wells, or sky did the consultant that you had working for you choose those ARCO wells to put on this exhibit?

were just readily available or ""

Now you estimated for Mr. Kellahin that you'ld recover 175-million Mef from this lease. I think you meant --

A. On the new well.

a -- 175-million cubic feet.

A Yes, sir. Yes, sir, that's correct.

Q And that would be from this new proposed No. 5 Well.

A Yes, sir.

And do you intend to install that pump on the No. 3 and restore it to production, keep it on production?

A You, sir.

Q So you'll have the dual dedication of this 160 to the two wells, then?

A Well, if the new well does not make the allowable, which is doubtful.

would
The properties has breating for awhile.

The cither - 1'd either plug them or

leave them resting, yes, ser.

The okay.

The MUTTIR: Are shore any further questions of Mr. McCasland? He may be excused.

To you have anything further, Mr. Kellahin?

MR. MUTTIR: Does anyone have anything they wish to offer in Case Number 6568?

We'll take the case under advisement.

(Hearing concluded.)

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18 19

20

21

22

23 24

25

HEPONGER'S CHRETE LUASE

I, SALLY WALTON BIYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby carify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No theard by me, on_

Examiner Oil Conservation Division



ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

JERRY APODACA

NICK FRANKLIN SECRETARY

June 29, 1979

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Mr. Thomas Kellahin Kellahin & Kellahin Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico Re: CASE NO. 6568 ORDER NO. R-6040 Applicant:	
Dallas McCasland	
Dear Sir:	
Enclosed herewith are two copies of the above-referent Division order recently entered in the subject case. Yours very truly, JOE D. RAMEY Director	ced
JDR/fd	
Copy of order also sent to:	
Hobbs OCC x Artesia OCC x Aztec OCC	
Other	

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 6568 Order No. R-6040

APPLICATION OF DALLAS McCASLAND FOR APPROVAL OF INFILL DRILLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on June 13, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 26th day of June, 1979, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Dallas McCasland, seeks a finding that the drilling of his Woolworth Well No. 5 to be located in Unit N of Section 28, Township 24 South, Range 37 East, NMPM, Jalmat Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by the existing well.
- (3) That the applicant further seeks approval of a waiver of existing well-spacing requirements.
- (4) That the standard spacing unit in the Jalmat Gas Pool is 640 acres.
- (5) That Dallas McCasland is the operator of a 160-acre non-standard proration unit consisting of the SW/4 of said Section 28 in said Jalmat Gas Pool.

-2-Case No. 6568 Order No. R-6040

- (6) That said 160-acre non-standard proration unit is dedicated to the applicant's Woolworth Well No. 3 located in Unit M of said Section 28.
- (7) That the evidence presented demonstrated that said Woolworth Well No. 3 cannot as effectively and efficiently drain said dedicated 160-acre non-standard proration unit as would a new well to be drilled thereon (said Woolworth Well No. 5) which may be completed and stimulated using modern techniques and processes.
- (8) That the evidence presented further demonstrated that the drilling and completion of applicant's said Woolworth Well No. 5 should result in the production of an additional 175,000 MCF of gas from said non-standard proration unit which would not otherwise be recovered.
- (9) That such additional recovery will result in such unit being more efficiently and economically drained.
- (10) That said Woolworth Well No. 5 is to be drilled as an "infill" well on the existing 160-acre non-standard proration unit.
- (11) That in order to permit the drainage of a portion of the reservoir covered by said 160-acre non-standard proration unit which cannot be effectively and efficiently drained by the existing well thereon, the subject application for infill drilling should be approved as an exception to the standard well spacing requirements for said Jalmat Gas Pool.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Dallas McCasland, is hereby authorized to drill his Woolworth Well No. 5 to be located in Unit N of Section 28, Township 24 South, Range 37 East, NMPM, as an infill well on an existing 160-acre non-standard proration unit being the SW/4 of said Section 29, Jalmat Cas Pool, Lea County, New Mexico. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by the existing 160-acre non-standard proration unit which cannot efficiently and economically be drained by any existing well thereon.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-3-Case No. 6568 Order No. R-6040

DONE at Santa Fe, New Mexico, on the day and year here-inabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION-DIVISION

JOE D. RAMEY Director

DALLAS MCCASLAND

WOOLWORTH PROSPECT

Application of Dallas McCasland for approval of infill drilling, Lea County, New Mexico. Applicant seeks a finding that the drilling of its Woolworth No. 5 to be located in Unit N of Section 28, Township 24 South, Range 36 East, Jalmat Yates Gas Field, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

CASIANC EXHIBIT NO A - 1

CASE NO 65 8

State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 Sante Fe, New Mexico 87501

Gentlemen:

Re: Dallas McCasland Woolworth No. 5 Section 28, T-24-S, R-37-E, Lea County, New Mexico

The intent of this letter is to present evidence to prove that the proposed infill drilled well, the Dallas McCasland Woolworth No. 5, is necessary to efficiently and effectively drain that portion of the proration unit which cannot be so drained by the existing well, Woolworth No. 3. The above mentioned proration unit consists of the SW/4 of Section 28, Township 24 South, Range 37 East, Lea County, New Mexico, in the Jalmat Yates Gas Field located seven miles north of Jal, New Mexico.

Two wells have been drilled on this proration unit. One well, the Woolworth No. 4, is temporarily abandoned and has not produced since May, 1962. In May, 1977, an attempt was made to clean out and re-complete, but junk was encountered at a depth of 3045' and the well was again temporarily abandoned. In September, 1978, the well was tested for one month and produced only 67 MCF, since then the well has again been temporarily abandoned. This well has a cumulative of 1,356,650 MCF of gas. The second well on this proration unit is the Woolworth No. 3. This well was drilled in 1939 by Weir Drilling Company and has produced a cumulative of 3,488,736 MCF of gas. Exhibit "A" shows the annual production and 72-hour shut-in wellhead pressures. Exhibit "B" shows the decline curves of these two wells.

Exhibit "C" includes a cross-section, contour map on the top of the Yates formation and land plat showing the Dallas McCasland acreage and wells of

interest in the area. The cross-section extends across leases that are producing from the Yates, Seven Rivers and Queen formations. The section shows that the structural relationship between leases is fairly level. The structure map confirms and enlarges the formation included in the cross-section.

The Dallas McCasland acreage is within the Langlie Mattix Woolworth Queen waterflood unit in the Jalmat Field. The Jalmat Field is located in the central portion on an extensive northwest southeast trending anticlinal structure.

Exhibit "D" shows the annual production and 72-hour shut-in wellhead pressures of two wells operated by ARCO, the Harrison WN No. 1D and the Harrison WN No. 6D. These two wells are in the same proration unit SW/4 of Section 29, T-24-S, R-37-E, and both produced from the Yates. This proration unit is a one-half mile west offset to the McCasland Woolworth No. 3 and the proposed Woolworth No. 5. The Harrison WN No. 1D completed in the Yates in 1965 and worked over in 1973, has a cumulative of 2,584,613 MCF of gas. The Harrison WN No. 6D was drilled in 1977 and has produced a cumulative of 232,644 MCF of gas which would have been lost if this well had not been drilled. From Exhibit "D", note that in 1977 when the Harrison No. 6D was drilled the 72-hour shut-in wellhead pressure was 100 psi higher on this well than the Harrison No. 1D. This indicates that the bottom hole pressure was also higher and proves that the Yates formation around the Harrison No. 6D had not been drained effectively. Exhibit "E" shows the decline curves of these two wells.

A tabulation of six Jalmat Yates gas wells is presented to show recent annual production rates, annual 72-hour shut-in wellhead pressures and gas cumulatives. From this tabulation it will be noted that the Reading & Bates Humble L State No. 3 (southwest to Dallas McCasland Woolworth No. 3) and Shenandoah Woolworth No. 3 (east offset) have cumulative production figures higher than the McCasland Woolworth No. 3 and also wells to the north and northwest. This is an indication that the permeability is tighter as you move in that direction. Also note that the recently drilled wells had higher shut-in wellhead pressures than producing wells in this area during the same period. This again is an indication of a tight formation which has not been drained by offsetting wells.

Because of the depleted condition of the Yates reservoir, it is not feasible or economical that additional treatment or remedial work would greatly effect the production or extend the drainage area of the Woolworth No. 3. In addition, the proposed location of the Woolworth No. 5 has no offsetting Yates gas wells to the east or south that can drain the reservoir in this area.

These exhibits have been presented in an effort to prove that the proposed Woolworth No. 5, because of its location and reservoir characteristics can produce gas in commercial quantities and increase production from the proration unit. Using the reservoir data that is available, the Woolworth No. 5 can reasonably be expected to produce a cumulative in excess of 175,000 MCF of

gas. Without the drilling of this infill well, these reserves will be lost and the operator will be denied an opportunity to produce these reserves and the consumers will be denied the needed gas.

Respectfully,

DALLAS MCCASLAND

Zack Monroe Consultant

ZM/ki Attach.

N. See

ļ

EXHIBIT "A"

ANNUAL PRODUCTION

MCCASLAND WOOLWORTH #3 Sec. 28, T-24-S, R-37-E

MCCASLAND WOOLWORTH #4 Sec. 28, T-24-S, R-37-E

BEFORE EXAMINER NUTTER

CONSERVATION DIVICION

VOLUME	72-Hour Shu
1,326,269 28,438 22,578	NA 221
7,736	AA

YEAR	VOLUME	72-Hour Shut-in Press.
Cum. to 1960	2,008,079	
1960	46,454	NA
1961	56,523	390
1962	94,321	393
1963	159,198	380
1964	156,719	257
1965	119,311	258
1966	83,688	209
1967	1.55,528	268
1968	109,367	272
1969	100,923	189
1970	84,723	176
1971	80,002	169
1972	93,184	169
1973	68,402	163
1974	39,788	142
1975	2,422	129
1976	3,481	NA
1977	39,749	143
1978	33,328	NA
Cum. to 1/1/79	3,488,736	

67 J&A

1,356,650

62 .. 63 . 64 SW/4 of Sec 28, T-24-S, R-87-E 3. 65 1066 McCBSLAND - Operator 19 67 19 68 િ 69 10 70 19 7/ 10 72 19 73 1" 74 10 75 10.76 BEFORE EXAMINER
OIL CONSERVATION

Mc CASIAN DEX 11511

6.568 77

EXHIBIT "D"

ANNUAL PRODUCTION

ARCO HARRISON WN #1 SEC. 29, T-24-S, R-37-E

ARCO HARRISON WN #6 SEC. 29, T-24-S, R-37-E

BEFORE EXAMINER NUTTER

YEAR	VOLUME	72-Hour Shut-in Press.	VOLUME	72-Hour Shut
Cum. to 1968	609,747			
1968	221,884	162		
1969	104,415	NA		
1970	77,478	162		
1971	89,855	NA		
1972	123,508	284		
1973	275,973	256		
1974	289,893	210		
1975	251,952	205		
1976	249,239	181		
1977	197,842	145	112,107	251
1978	92,827	NA	120,537	NA
Cum. 1/1/79	2,584,613		232,644	

McCASIAND EXHIBIT NO CASE NO. 6568

and before

Ē

<u>~</u>

1

DEFORE EXAMINER NUTTER OIL CONSERVATION DIVISION

TABULATION 72-HOUR SHUT-IN & ANNUAL PRODUCTION

EXHIBIT "F"

	ARCO HARRISON 29-24-37	HARRISON WN #2A		TAL 8	AMOCO WOOLWORT 28-24-37		SHENANDO MOOLMORTI 28-24-37		READING A HUNBLE L 32-24-37	BATES STATE #3	EL PASO SHELL BLACK 21-24-37		
YEAR	PROD. MCF	SI PRESS.	PROD. MCF	S1 PRESS	PROD. MCF	SI PRESS.	PROD. MCF	SI PRESS.	PROD. MCF	SI PRESS.	PROD.	SI PRESS.	
1963					3,213	238	124,849	183	76,869	298	28,115	NA	
1969					127,835	205	95,242	183	67,104	274	120,505	253	
1970					117,724	171	79,445	167	123,334	245	76,173	236	
1971					119,376	182	65,398	165	151,375	227	92,586	204	
1972					94,899	166	74,941	143	193,312	NA	84,714	241	
1973					95,370	155	62,897	143	176,224	193	46,369	198	
1974		_	17,516	NA	85,750	110	55,272	134	167,507	162	29,633	238	
1975		-	97,812	495	53,213	152	50,906	116	166,735	153	22,782	194	
1976	184,705	194	77,501	343	75,585	ПA	44,234	NА	143,567	155	29,170	183	
1977	143,016	129	29,501	217	59,020	HA	41,023	NA	103,418	141	17,759	124	
1978	68,910	NA	25,616	NA	29,962	NA	36,843	NA	119,717	NA	5,600	nA	
1/1/79 Cum.	396,631		247,813		3,220,649		4,876,587	-	7,059,347		2,046,242		

DALLAS MCCASLAND WOOLWORTH PROSPECT

Application of Dallas McCasland for approval of infill drilling, Lea County, New Mexico. Applicant seeks a finding that the drilling of its Woolworth No. 5 to be located in Unit N of Section 28, Township 24 South, Range 36 East, Jalmat Yates Gas Field, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 Sante Fe, New Mexico 87501

Gentlemen:

Re: Dallas McCasland Woolworth No. 5 Section 28, T-24-S, R-37-E, Lea County, New Mexico

The intent of this letter is to present evidence to prove that the proposed infill drilled well, the Dallas McCasland Woolworth No. 5, is necessary to efficiently and effectively drain that portion of the proration unit which cannot be so drained by the existing well, Woolworth No. 3. The above mentioned proration unit consists of the SW/4 of Section 28, Township 24 South, Range 37 East, Lea County, New Mexico, in the Jalmat Yates Gas Field located seven miles north of Jal, New Mexico.

Two wells have been drilled on this proration unit. One well, the Woolworth No. 4, is temporarily abandoned and has not produced since May, 1962. In May, 1977, an attempt was made to clean out and re-complete, but junk was encountered at a depth of 3045' and the well was again temporarily abandoned. In September, 1978, the well was tested for one month and produced only 67 MCF, since then the well has again been temporarily abandoned. This well has a cumulative of 1,356,650 MCF of gas. The second well on this proration unit is the Woolworth No. 3. This well was drilled in 1939 by Weir Drilling Company and has produced a cumulative of 3,488,736 MCF of gas. Exhibit "A" shows the annual production and 72-hour shut-in wellhead pressures. Exhibit "B" shows the decline curves of these two wells.

Exhibit "C" includes a cross-section, contour map on the top of the Yates formation and land plat showing the Dallas McCasland acreage and wells of

interest in the area. The cross-section extends across leases that are producing from the Yates, Seven Rivers and Queen formations. The section shows that the structural relationship between leases is fairly level. The structure map confirms and enlarges the formation included in the cross-section.

The Dallas McCasland acreage is within the Langlie Mattix Woolworth Queen waterflood unit in the Jalmat Field. The Jalmat Field is located in the central portion on an extensive northwest southeast trending anticlinal structure.

Exhibit "D" shows the annual production and 72-hour shut-in wellhead pressures of two wells operated by ARCO, the Harrison WN No. 1D and the Harrison WN No. 6D. These two wells are in the same proration unit SW/4 of Section 29, T-24-S, R-37-E, and both produced from the Yates. This proration unit is a one-half mile west offset to the McCasland Woolworth No. 3 and the proposed Woolworth No. 5. The Harrison WN No. 1D completed in the Yates in 1965 and worked over in 1973, has a cumulative of 2,584,613 MCF of gas. The Harrison WN No. 6D was drilled in 1977 and has produced a cumulative of 232,644 MCF of gas which would have been lost if this well had not been drilled. From Exhibit "D", note that in 1977 when the Harrison No. 6D was drilled the 72-hour shut-in wellhead pressure was 100 psi higher on this well than the Harrison No. 1D. This indicates that the bottom hole pressure was also higher and proves that the Yates formation around the Harrison No. 6D had not been drained effectively. Exhibit "E" shows the decline curves of these two wells.

A tabulation of six Jalmat Yates gas wells is presented to show recent annual production rates, annual 72-hour shut-in wellhead pressures and gas cumulatives. From this tabulation it will be noted that the Reading & Bates Humble L State No. 3 (southwest to Dallas McCasland Woolworth No. 3) and Shenandoah Woolworth No. 3 (east offset) have cumulative production figures higher than the McCasland Woolworth No. 3 and also wells to the north and northwest. This is an indication that the permeability is tighter as you move in that direction. Also note that the recently drilled wells had higher shut-in wellhead pressures than producing wells in this area during the same period. This again is an indication of a tight formation which has not been drained by offsetting wells.

Because of the depleted condition of the Yates reservoir, it is not feasible or economical that additional treatment or remedial work would greatly effect the production or extend the drainage area of the Woolworth No. 3. In addition, the proposed location of the Woolworth No. 5 has no offsetting Yates gas wells to the east or south that can drain the reservoir in this area.

These exhibits have been presented in an effort to prove that the proposed Woolworth No. 5, because of its location and reservoir characteristics can produce gas in commercial quantities and increase production from the proration unit. Using the reservoir data that is available, the Woolworth No. 5 can reasonably be expected to produce a cumulative in excess of 175,000~MCF of

gas. Without the drilling of this infill well, these reserves will be lost and the operator will be denied an opportunity to produce these reserves and the consumers will be denied the needed gas.

Respectfully,

DALLAS MCCASLAND

Zack Monroe Consultant

ZM/ki Attach.

EXHIBIT "A"

ANNUAL PRODUCTION

MCCASLAND WOOLWORTH #3 Sec. 28, T-24-S, R-37-E

MCCASLAND WCOLWORTH #4 Sec. 28, T-24-S, R-37-E

YEAR	VOLUME	72-Hour Shut-in Press.	VOLUME	72-Hour Shut-in Press.
Cum. to 1960	2,008,079		1,326,269	
1960	46,454	NA	28,438	NA
1961	56,523	390	22,578	221
1962	94,321	393	7,736	NA
1963	159,198	380		
1964	156,719	257		
1965	119,311	258		
1966	83,688	209		*
1967	155,528	268		
1968	109,367	272		
1969	100,923	189		
1970	84,723	176		
1971	80,002	169		
1972	93,184	169		
1973	68,402	168		
1974	39,788	14?		
1975	2,422	129		
1976	3,481	NA		
1977	39,749	143 L		
1978	33,328	NA	67	J&A
Cum. to 1/1/79	3,488,736		1,356,650	

0 . 61 62 . 63 . 64 17.65 SW/4 LEA COUNTY, NEW MEXICO 1... 66 MCCBSLAND - Openator EXHIBIT B 19 67 ा ७**७**८ 19 69 19 70 197/ Ju 72 10 **23** 19 74 1075 1-- 76 10.77 78 1.. 79

EXHIBIT "D"

ANNUAL PRODUCTION

ARCO HARRISON WN #1 SEC. 29, T-24-S, R-37-E

ARCO HARRISON WN #6 SEC. 29, T-24-S, R-37-E

YEAR	VOLUME	72-Hour Shut-in Press.	VOLUME	72-Hour Shut-in Press.
Cum. to 1968	609,747			
1968	221,884	162		
1969	104,415	NĀ		
1970	77,478	162		
1971	89,855	NA		
1972	123,508	284		
1973	275,973	256		
1974	289,893	210		
1975	251,952	205		
1976	249,239	181		
1977	197,842	145	112,107	251
1978	92,827	NA	120,537	NĀ
Cum. 1/1/79	2,584,613		232,644	

EXHIBIT "F" TAPULATION 72-HOUR SHUT-IN & ANNUAL PRODUCTION

	r HA	ARCO HARRISON WN #2A 29-24-37		RISON WN #2A JACK A #8			R #4	SHEMANDO/ WOOLWORTI 28-24-37		PEADING A HUMBLE L 32-24-37		EL PASO SHELL BLACK #2 21-24-37		
YEAR	PR MC	00. F	SI PRESS.	PROD. MCF	ST PRESS	PROD.	SI PRESS.	PROD. MCF	SI PRESS.	PROD. MCF	SI PRESS.	PROD. MCF	SI PRESS.	
1963						3,213	238	124,849	105	76,869	200	20. 11.	11.4	
1969						127,835	205	95,242	183 183	67,104	293 274	28,115 120,505	NA	
1970						117,724	171	79,445	167	123,334	245	76,173	253	
1971						119,376	182	65,398	165	151,375	243	92,536	236	
1972						94,899	166	74,941	143	193,312	NA	84,714	204 241	
1973						95,370	155	62,897	143	176.224	193	46,369	193	
1974				17,516	NA	85,750	110	55,272	134	167,507	162	29,633	238	
1975				97,812		53,213	152	50,906						
1976	10	4 700	104		495				116	166,735	153	22,782	194	
1977		4,705	194	77,501	343	75,585	NA	44,234	NA	143,567	155	29,170	183	
		3,016	129	29,501	217	59,020	NA	41,028	HA.	103,418	141	17,759	124	
1978	ь	8,910	nA	25,616	NA	29,962	NΑ	36,843	НA	119,717	NΑ	5,600	NA	
1/1/79 Cum.	39	6,631		247,813		3,220,649		4,876,587		7,059,347		2,046,242		

DALLAS MCCASLAND

WOOLWORTH PROSPECT

Application of Dallas McCasland for approval of infill drilling, Lea County, New Mexico. Applicant seeks a finding that the drilling of its Woolworth No. 5 to be located in Unit N of Section 28, Township 24 South, Range 36 East, <u>Jalmat Yates</u>

Gas Field, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 Sante Fe, New Mexico 87501

Gentlemen:

Re: Dallas McCasland Woolworth No. 5 Section 28, T-24-S, R-37-E, Lea County, New Mexico

The intent of this letter is to present evidence to prove that the proposed infill drilled well, the Dallas McCasland Woolworth No. 5, is necessary to efficiently and effectively drain that portion of the proration unit which cannot be so drained by the existing well, Woolworth No. 3. The above mentioned proration unit consists of the SW/4 of Section 28, Township 24 South, Range 37 East, Lea County, New Mexico, in the Jalmat Yates Gas Field located seven miles north of Jal, New Mexico.

Two wells have been drilled on this proration unit. One well, the Woolworth No. 4, is temporarily abandoned and has not produced since May, 1962. In May, 1977, an attempt was made to clean out and re-complete, but junk was encountered at a depth of 3045' and the well was again temporarily abandoned. In September, 1978, the well was tested for one month and produced only 67 MCF, since then the well has again been temporarily abandoned. This well has a cumulative of 1,356,650 MCF of gas. The second well on this proration unit is the Woolworth No. 3. This well was drilled in 1939 by Weir Drilling Company and has produced a cumulative of 3,488,736 MCF of gas. Exhibit "A" shows the annual production and 72-hour shut-in wellhead pressures. Exhibit "B" shows the decline curves of these two wells.

Exhibit "C" includes a cross-section, contour map on the top of the Yates formation and land plat showing the Dallas McCasland acreage and wells of

interest in the area. The cross-section extends across leases that are producing from the Yates, Seven Rivers and Queen formations. The section shows that the structural relationship between leases is fairly level. The structure map confirms and enlarges the formation included in the cross-section.

The Dallas McCasland acreage is within the Langlie Mattix Woolworth Queen waterflood unit in the Jalmat Field. The Jalmat Field is located in the central portion on an extensive northwest southeast trending anticlinal structure.

Exhibit "D" shows the annual production and 72-hour shut-in wellhead pressures of two wells operated by ARCO, the Harrison WN No. 1D and the Harrison WN No. 6D. These two wells are in the same proration unit SW/4 of Section 29, T-24-S, R-37-E, and both produced from the Yates. This proration unit is a one-half mile west offset to the McCasland Woolworth No. 3 and the proposed Woolworth No. 5. The Harrison WN No. 1D completed in the Yates in 1965 and worked over in 1973, has a cumulative of 2,584,613 MCF of gas. The Harrison WN No. 6D was drilled in 1977 and has produced a cumulative of 232,644 MCF of gas which would have been lost if this well had not been drilled. From Exhibit "D", note that in 1977 when the Harrison No. 6D was drilled the 72-hour shut-in wellhead pressure was 100 psi higher on this well than the Harrison No. 1D. This indicates that the bottom hole pressure was also higher and proves that the Yates formation around the Harrison No. 6D had not been drained effectively. Exhibit "E" shows the decline curves of these two wells.

A tabulation of six Jalmat Yates gas wells is presented to show recent annual production rates, annual 72-hour shut-in wellhead pressures and gas cumulatives. From this tabulation it will be noted that the Reading & Bates Humble L State No. 3 (southwest to Dallas McCasland Woolworth No. 3) and Shenandoah Woolworth No. 3 (east offset) have cumulative production figures higher than the McCasland Woolworth No. 3 and also wells to the north and northwest. This is an indication that the permeability is tighter as you move in that direction. Also note that the recently drilled wells had higher shut-in wellhead pressures than producing wells in this area during the same period. This again is an indication of a tight formation which has not been drained by offsetting wells.

Because of the depleted condition of the Yates reservoir, it is not feasible or economical that additional treatment or remedial work would greatly effect the production or extend the drainage area of the Woolworth No. 3. In addition, the proposed location of the Woolworth No. 5 has no offsetting Yates gas wells to the east or south that can drain the reservoir in this area.

These exhibits have been presented in an effort to prove that the proposed Woolworth No. 5, because of its location and reservoir characteristics can produce gas in commercial quantities and increase production from the proration unit. Using the reservoir data that is available, the Woolworth No. 5 can reasonably be expected to produce a cumulative in excess of 175,000 MCF of

gas. Without the drilling of this infill well, these reserves will be lost and the operator will be denied an opportunity to produce these reserves and the consumers will be denied the needed gas.

Respectfully,

DALLAS MCCASLAND

Zack Monroe Consultant

ZM/ki Attach.

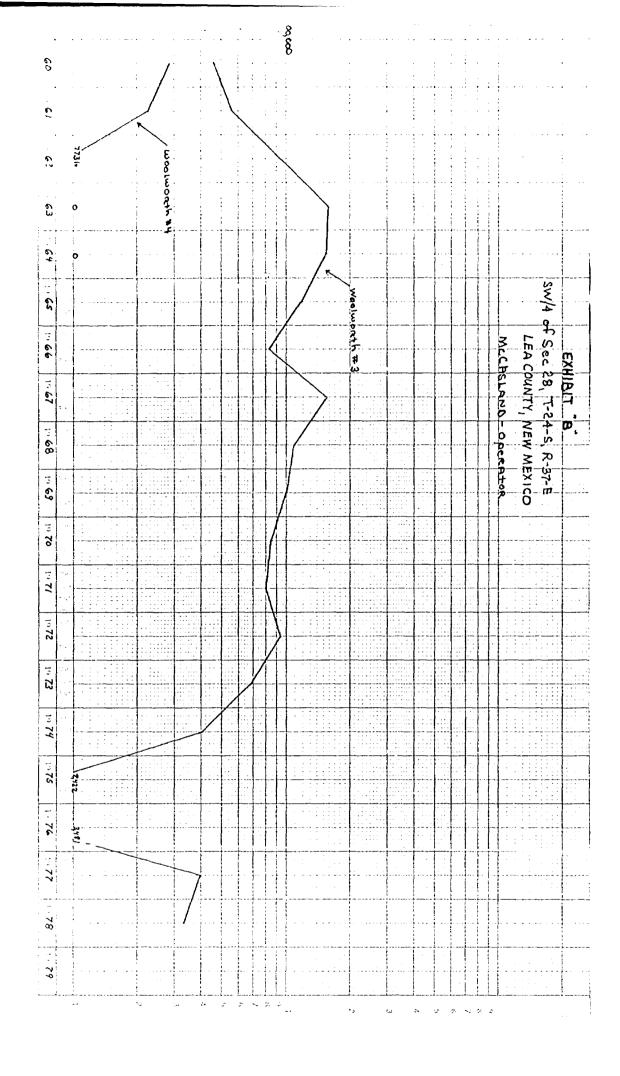
EXHIBIT "A"

ANNUAL PRODUCTION

MCCASLAND WOOLWORTH #3 Sec. 28, T-24-S, R-37-E

MCCASLAND WOOLWORTH #4 Sec. 28, T-24-S, R-37-E

YEAR	VOLUME	72-Hour Shut-in Press.	VOLUME 72-Hour Shut-in Press.
Cum. to 1960	2,008,079		1,326,269
1960	46,454	NA	28,438 NA
1961	56,523	390	22,578 221
1962	94,321	393	7,736 NA
1963	159,198	380	•
1964	156,719	257	
1965	119,311	258	
1966	83,688	209	
1967	155,528	268	
1968	109,367	272	
1969	100,923	189	
1970	84,723	176	
1971	80,002	169	
1972	93,184	169	
1973	68,402	168	
1974	39,788	142	
1975	2,422	129	
1976	3,481	NA	
1977	39,749	143	
1978	33,328	NA	67 J&A
Cum. to 1/1/79	3,488,736		1,356,650



EXRIBIT "D"

ANNUAL PRODUCTION

ARCO HARRISON WN #1 SEC. 29, T-24-S, R-37-E ARCO HARRISON WN #6 SEC. 29, T-24-S, R-37-E

YEAR	VOLUME	72-Hour Shut-in Press.	VOLUME	72-Hour Shut-in Press.
Cum. to 1968	609,747			
1968	221,884	162		
1969	104,415	NA		
1970	77,478	162		
1971	89,855	NA		
1972	123,508	284		
1973	275,973	256		
1974	289,893	210		
1975	251,952	205		
1976	249,239	181		
1977	197,842	145	112,107	251
1978	92,827	NA	120,537	NA
Cum. 1/1/79	2,584,613		232,644	

/

Ţ

			, (N (ز,	t* (ונ	ν,	, (r) .	ې د	į	YEAR	•	, .	يد	 J.	<i>3</i> ·	·. :	A G	00				٠,
-	. 68										3000	}									9000				
	69																								
	70									<u>/</u>							 					· · · · · ·			
	1.7. 71									\		· · · ·													
	10 72	21																				LEA	SW/4 0		
	19 73 1	* #1 																		ARCO		COUN	f Sec	_m ×	
- - -	្រ 74														\ 					- ಲಿಎಂಡಿ		TY NEI	29, 7-2	HIBIT	
	19 75	event Doda														HARRI				よっ		W MEXI	24-S, R	៣	
	19 76 1								//aa/			1		:	\mathbf{Z}	30~ Wzl #	 ١.	I				100	W		1::::
	19 77 19								2		/	$\geq -$			/										
	78 10							1			,	. : .													
	7.9																		1						-
	2 BB											-											· .		
	00	E 47																1							

 $\text{EXHIBIT}[[n]E_n]$ TABULATION 72-HOUR SHUT-IN & ANNUAL PRODUCTION

	ARCO HARRISON 29-24-37	HARRISON WN #2A		SON WN #2A JACK A #8				AMOCO SHENANDOAH WOOLWORTH #4 WOOLWORTH 28-24-37 28-24-37			READING & BATES HUMBLE L STATE 32-24-37		EL PASO SHELL BLA 21-24-37	1CK ≠2
YEAR	PROD. MCF	SI PRESS.	PROD. MCF	SI PRESS.	PROD, MCF	SI PRESS.	PROD. MCF	SI PRESS.	PROD. MCF	SI PRESS.	PROD.	S1 PRESS.		
1968					3,213	238	124,849	183	76,869	293	28,115	HA		
1969					127,835	205	95,242	183	67,104	274	120,505	253		
1970					117,724	171	79,445	167	123,334	245	76,173	236		
1971					119,376	182	65,398	165	151,375	227	92,586	204		
1972					94,839	166	74,941	143	193,312	NA	84,714	241		
1973					95,370	155	62,897	143	176,224	193	46,369	193		
1974			17,516	NA	85,750	110	55,272	134	167,507	162	29,633	238		
1975			97,812	495	53,213	152	50,906	116	166,735	153	22,792	194		
1976	184,705	194	77,501	343	75,585	nΑ	44,234	HA	143,567	155	29,170	183		
1977	143,016	129	29,501	217	59,020	NA	41,023	nA	103,418	141	17,759	124		
1978	68,910	NA	25,616	Arı	29,962	NΛ	36,843	nA	119,717	NA	5,600	nA		
1/1/79 Cum.	396,631		247,813		3,220,649		4,876,587		7,059,347		2,046,242			

Dockets Nos. 24-79 and 25-79 are tentatively set for hearing on June 27 and July 11, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - WEDNESDAY - JUNE 6, 1979

OIL CONSERVATION CORMISSION ~ 9 A.M. - ROOM 205 STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6495: (DE NOVO)

150

Application of Amax Chemical Corporation for the amendment of Order No. R-111-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-111-A to extend the boundaries of the Potash-Oil Area by the inclusion of certain lands in Sections 23 and 24, Township 19 South, Range 29 East, Sections 1, 4, 5, 6, 7, 11, 12, 13, 14, 19, 20, 23, 24, and 29, Township 19 South, Range 30 East, and Sections 7, 8, 17, 18, and 19, Township 19 South, Range 31 East, all in Eddy County, New Mexico.

Upon application of Amax Chemical Corporation this case will be heard De Novo pursuant to the provisions of Rule 1220.

Docket No. 23-79

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 13, 1979

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for July, 1979, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for July, 1979, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- CASE 6560: Application of Exxon Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (combination) of its "AB" State Well No. 4 located in Unit A of Section 16, Township 24 South, Range 37 East, to produce gas from the Langlie Mattix Pool and oil from the Fowler-Upper Yeso Pool. through parallel strings of casing cemented in a common well bore.
- Application of Amoco Production Company for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, proposes to directionally drill its State "NC" Well No. 1 located 1980 feet from the South and West lines of Section 21, Township 16 South, Range 35 East, Townsend Field, to a bottom hole location within 100 feet of a point 990 feet from the South line and 2310 feet from the East line of said Section 21, the S/2 of said Section 21 to be dedicated to the well.
- CASE 6562: Application of Orla Petco, Inc. for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Ramsey Sand of the Be 1 Canyon formation through the open hole interval from 2498 feet to 2508 feet in its Gourley-Federal Well No. 4 located in Unit J of Section 31, Township 22 South, Range 28 East, Herradura Bend-Delaware Pool.
- CASE 6563: Application of Roy L. McKay for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for his North Woolworth Ranch Unit Area, comprising 1,280 acres, more or less, of State lands in Township 23 South, Range 35 East.
- CASE 6564: Application of Herndon Oil & Gas Co. for an unorthodox oil well location, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the unorthodox location of its O. A. Woody Well

 No. 1 in the center of Unit E, Section 35, Township 16 South, Range 38 East, Knowles-Devonian Pool.
- CASE 6565: Application of Lewis B. Burleson, Inc. for compulsory pooling, a non-standard gas proration unit, and an unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Jalmat Gas Pool underlying the W/2 SE/4 of Section 20, Township 25 South, Range 37 East, to form an 80-acre non-standard gas proration unit to be dedicated to a well to be drilled at an unorthodox location 1650 feet from the South and East lines of said Section 20. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- CASE 6566: Application of Lowis B. Burleson, Inc. for an unorthodox well location and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the SW/4 of Section 10, Township 24 South, Ronge 36 East, Jalmat Gas Pool, to be dedicated to a well to be drilled 2310 feet from the South and West lines of said Section 10.
- CASE 6567: Application of Mewbourne Oil Company for an unorthodox well location, Chaves County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the unorthodox location of its State 25 Com Well
 No. 1 660 feet from the South line and 1650 feet from the West line of Section 25, Township 14 South,
 Range 27 East, Buffalo Valley-Pennsylvanian Gas Pool, the S/2 of said Section 25 to be dedicated to the
 well.
- CASE 6568: Application of Dallas McCasland for approval of infill drilling, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks a waiver of existing well spacing requirements and a finding that the drilling of his Woolworth Well No. 5 located in Unit P of Section 28, Township 24 South, Range 37 East, Jalmat Gas Pool, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.
- Application of Continental Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Lockhart A-17 Well No. 2 located in Unit I of Section 17, Township 21 South, Range 37 East, to produce gas from the Eumont Gas Pool through the casing-tubing annulus and oil from the Blinebry Oil and Gas Pool through tubing.
- Application of Continental Oil Company for a non-standard gas proration unit and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 228-acre non-standard gas proration unit comprising the SW/4 and S/2.SE/4 of Section 18, Township 21 South, Range 36 East, Eumont Gas Pool, to be simultaneously dedicated to applicant's Lockhart A-18 Wells Nos. 2, 3, and 4, located in Units O, K, and M, respectively, of said Section 18.
- CASE 6571: Application of Continental Oil Company for vertical pool limit redefinition, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks an order extending the vertical limits of the Langlie Mattix
 Pool to include the lowermost 165 feet of the Seven Rivers formation and the concomitant contraction of
 the vertical limits of the Jalmat Gas Pool underlying the following described lands: SW/4 W/2 SE/4 and
 SE/4 SE/4 of Section 35, Township 23 South, Range 36 East; and NW/4, W/2 NE/4, and SE/4 NE/4 of Section
 1, Township 24 South, Range 36 East.
- CASE 6537: (Continued from May 9, 1979, Examiner Hearing)

Application of Harper Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for its West Ranger Lake Unit Area, comprising 1,120 acres, more or less, of State lands in Township 12 South, Range 34 East, Lea County, New Mexico.

CASE 6553: (Continued from May 23, 1979, Examiner Hearing)

Application of The Atlantic Richfield Company for approval of infill drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the Division waived existing well-spacing requirements and found that the drilling of additional wells was necessary to effectively and efficiently drain those portions of the proration units in the Empire Abo Unit located in Townships 17 and 18 South, Ranges 27, 28 and 29 East, which could not be so drained by the existing wells.

- CASE 6572: Application of ARCO Oil and Gas Company to drill a horizontal drainhole, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks approval to drill and complete its Empire Abo Unit Well No.

 K-142, located in Unit K of Section 2, Township 18 South, Range 27 East, Empire-Abo Pool, with a single horizontal drainhole of about 200 feet in length in the Abo formation.
- CASE 6573: Application of Mesa Petroleun Company for directional drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the directional drilling of its Well No. 7 in the Nash Unit, the surface location of which would be 685 feet from the North line and 1295 feet from the West line of Section 18, to be vertically drilled to approximately 7,000 feet, and then directionally drilled to a bottom hole location in the Morrow formation within 400 feet of a point 1315 feet from the South line and 1320 feet from the West line of Section 7, all in Township 23 South, Range 30 East.
- CASE 6574: Application of Toxas Oil & Cas Corp. for an unorthodox gas well location and compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Morrow formations underlying the E/2 of Section 6, Township 17 South, Range 35 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South and East lines of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6535: (Continued from May 23, 1979, Examiner Hearing)

Application of Torreon Oil Company for a waterflood project, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the San Luis-Mesaverde Pool by the injection of water into the Menefee formation through two wells located in Section 21, Township 18 North, Range 3 West, Sandoval County, New Mexico.

- CASE 6575: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating, contracting the vertical limits, and extending the horizontal limits of certain pools in Eddy, Lea, and Roosevelt Counties, New Mexico:
 - (a) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the Cass Draw-Wolfcamp Gas Pool. The discovery well is Black River Corporation Miller Com Well No. 1 located in Unit C of Section 10, Township 23 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 27 EAST, NMPM Section 10: N/2

(b) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Abo production and designated as the Runyan Ranch-Abo Gas Pool. The discovery well is Mesa Petroleum Company Runyan Federal Com Well No. 1 located in Unit E of Section 17, Township 19 South, Range 23 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 23 EAST, NMPM Section 17: NW/4

(c) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Runyan Ranch-Morrow Gas Pool. The discovery well is Mesa Petroleum Company Gardner State Well No. 1 located in Unit K of Section 8, Township 19 South, Range 23 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 23 EAST, NMPM Section 8: W/2

(d) EXTEND the Austin-Mississippian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 36 EAST, NMPM Section 16: SE/4
Section 17: NE/4

(e) EXTEND the Avalon-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM Section 28: N/2

(f) EXTEND the Avalon-Wolfcamp Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM Section 21: SW/4
Section 28: N/2

(g) EXTEND the Buffalo-Pennsylvanian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM Section 6: N/2

(h) EXTEND the Burton Flat-Morrow Cas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 27 EAST, NMPM Section 12: S/2 Section 13: N/2

(1) EXTEND the Chaveroo-San Andres Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 32 EAST, NMPM Section 34: SW/4

(j) EXTEND the South Culebra Bluff-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM Section 22: N/2 Section 35: N/2

(k) EXTEND the Diamond Mound-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 27 EAST, NMPM Section 12: N/2

(1) EXTEND the Dublin Ranch-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 26 EAST, NMPM Section 21: E/2

(m) EXTEND the East Eagle Creek Atoka-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 25 EAST, NAPM Section 13: S/2

(n) EXTEND the South Empire-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM Section 19: S/2

(o) EXTEND the Eumont Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM Section 32: W/2

(p) EXTEND the Hardy-Blinebry Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 FAST, NMPM Section 2: E/2 SE/4 and SW/4 SE/4

(q) EXTEND the Herradura Bend-Delaware Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM Section 5: E/2 NW/4

(r) EXTEND the Indian Flats-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 28 EAST, NMPM Section 25: S/2 Section 36: W/2

(s) EXTEND the Kennedy Farms-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 26 EAST, NMPM Section 10: S/2
Section 11: S/2
Section 16: E/2

(t) EXTEND the East Lake-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM Section 32: W/2

(u) EXTEND the Logan Draw-Cisco Canyon Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM Section 28: W/2

(v) EXTEND the West Malaga-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 28 EAST, NNPM Section 16: N/2

(w) EXTEND the Penasco Draw-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 24 EAST, NMPM Section 25: N/2

(x) EXTEND the South Peterson-Fusselman Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM Section 31: NW/4

(y) CONTRACT the vertical limits of the Shoe Bar-Pennsylvanian Gas Pool in Lea County, New Nexico, to the Atoka formation only and redesignate said pool as the Shoe Bar-Atoka Gas Pool, and extend the horizontal limits of said pool to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM Section 34: SW/4

TOWNSHIP 17 SOUTH, RANGE 35 FAST, NMPM Section 3: N/2

(z) EXTEND the Teague-Abo Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM Section 22: S/2 Section 27: NE/4

(aa) EXTEND the Todd-Wolfcamp Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 35 EAST, NMPM Section 22: NE/4

(bb) EXTEND the Tomahawk-San Andres Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 32 EAST, NMPM Section 30: W/2

(cc) EXTEND the West Tonto-Pennsylvanian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM Section 7: NW/4

(dd) EXTEND the Turkey Track-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM Section 14: W/2
Section 15: E/2
Section 23: All
Section 24: W/2

(ee) EXTEND the Wantz-Granite Wash Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM Section 3: SE/4
Section 10: NE/4

KELLAHIN and KELLAHIN

Attorneys at Law

Jason Kellahin W. Thomas Kellahin

Karen Aubrey

500 Don Gaspar Avenue Post Office Box 1769

Santa Fe, New Mexico 87501

May 16, 1979

Telephone 982-4285 Area Code 505

Mr. Joe Ramey Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

> Re: Dallas McCasland Infill Drilling

Dear Joe:

Please set the enclosed application for hearing on June 13, 1979.

Very truly yours,

W. Thomas Kellahin

CC: Oil Reports & Gas Services, Inc.

WTK:kfm

Enclosure

STATE OF NEW MEXICO DEPARTMENT OF MINERALS AND ENERGY OIL CONSERVATION DIVISION



IN THE MATTER OF THE APPLICATION OF DALLAS MCCASLAND FOR APPROVAL OF INFILL DRILLING, LEA COUNTY, NEW MEXICO

Case 6568

APPLICATION

Comes now DALLAS MCCASLAND by and through his attorneys, and applies to the Oil Conservation Division for an order for well-head price ceiling category determination and waiver of existing well-spacing requirements pursuant to the Special Rules of the Division and Part 271.305(b) Federal Energy Regulatory Commission's Regulations Implementing the Natural Gas Policy Act of 1978, and in support thereof would show:

- 1. Applicant is the operator of the SW/4 of Section 28, T24S, R37E, Lea County, New Mexico.
- 2. Applicant proposes to drill an infill well, the Dallas McCasland Woolworth No. 5 well to be located 990 feet from the South and East lines of said Section 28 with the SW/4 of said Section 28 dedicated to the well.
- 3. That there are two existing wells within the SW/4 being the proration and spacing unit of the proposed well.
- 4. That Applicant seeks a determination pursuant to FERC Rules, Part 271.305 that the subject well is necessary to effectively and efficiently drain a portion of the Jalmat Yates Gas Field, Lea County, New Mexico covered by the proposed proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit.
- 5. Applicant further seeks waiver of existing well-spacing requirements for the proposed well.

WHEREFORE Applicant requests that this matter be set

for hearing before the Division's Examiner and that after notice and hearing as required by law, that the application be granted.

Respectfully submitted,

KELLAHIN & KELALHIN

W. Thomas Kellahin
P. O. Box 1769
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

OIL CONSCRIPTION DIVISION SANTA FE

STATE OF NEW MEXICO DEPARTMENT OF MINERALS AND ENERGY OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF DALLAS MCCASLAND FOR APPROVAL OF INFILL DRILLING, LEA COUNTY, NEW MEXICO

Case 6568

APPLICATION

Comes now DALLAS MCCASLAND by and through his attorneys, and applies to the Oil Conservation Division for an order for well-head price ceiling category determination and waiver of existing well-spacing requirements pursuant to the Special Rules of the Division and Part 271.305(b) Federal Energy Regulatory Commission's Regulations Implementing the Natural Gas Policy Act of 1978, and in support thereof would show:

- 1. Applicant is the operator of the SW/4 of Section 28, T24S, R37E, Lea County, New Mexico.
- 2. Applicant proposes to drill an infill well, the Dallas McCasland Woolworth No. 5 well to be located 990 feet from the South and East lines of said Section 28 with the SW/4 of said Section 28 dedicated to the well.
- 3. That there are two existing wells within the SW/4 being the proration and spacing unit of the proposed well.
- 4. That Applicant seeks a determination pursuant to FERC Rules, Part 271.305 that the subject well is necessary to effectively and efficiently drain a portion of the Jalmat Yates Gas Field, Lea County, New Mexico covered by the proposed proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit.
- 5. Applicant further seeks waiver of existing well-spacing requirements for the proposed well.

WHEREFORE Applicant requests that this matter be set

for hearing before the Division's Examiner and that after notice and hearing as required by law, that the application be granted.

Respectfully submitted,

KELLAHIN & KELALHIN

W. Thomas/Kellahin
P. O. Box 1769
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT



STATE OF NEW MEXICO DEPARTMENT OF MINERALS AND ENERGY OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF DALLAS MCCASLAND FOR APPROVAL OF INFILL DRILLING, LEA COUNTY, NEW MEXICO

Case 6568

APPLICATION

Comes now DALLAS MCCASLAND by and through his attorneys, and applies to the Oil Conservation Division for an order for well-head price ceiling category determination and waiver of existing well-spacing requirements pursuant to the Special Rules of the Division and Part 271.305(b) Federal Energy Regulatory Commission's Regulations Implementing the Natural Gas Policy Act of 1978, and in support thereof would show:

- 1. Applicant is the operator of the SW/4 of Section 28, T24S, R37E, Lea County, New Mexico.
- 2. Applicant proposes to drill an infill well, the Dallas McCasland Woolworth No. 5 well to be located 990 feet from the South and East lines of said Section 28 with the SW/4 of said Section 28 dedicated to the well.
- 3. That there are two existing wells within the SW/4 being the proration and spacing unit of the proposed well.
- 4. That Applicant seeks a determination pursuant to FERC Rules, Part 271.305 that the subject well is necessary to effectively and efficiently drain a portion of the Jalmat Yates Gas Field, Lea County, New Mexico covered by the proposed proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit.
- 5. Applicant further seeks waiver of existing well-spacing requirements for the proposed well.

WHEREFORE Applicant requests that this matter be set

for hearing before the Division's Examiner and that after notice and hearing as required by law, that the application be granted.

Respectfully submitted,

KELLAHIN & KELALHIN

W. Thomas/Kellahin
P. O. Box 1769
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

dr/

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 6568

Order No. <u>R-6040</u>

APPLICATION OF DALLAS McCASLAND FOR APPROVAL OF INFILL DRILLING, LEA COUNTY, NEW MEXICO.

Osu

ORDER OF THE DIVISION

BY THE DIVISION:

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
 - (2) That the applicant, Dallas McCasland, seeks a finding that the drilling of his Woolworth Well No. 5 to be located in Unit ₱ of Section 28, Township 24 South, Range 37 East, NMPM, . Jalmat Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by the existing well.

- (3) That the applicant further seeks approval of a waiver of existing well-spacing requirements.
- (4) That the standard spacing unit in the Jalmat Gas Pool is 640 acres.
- (5) That Dallas McCasland is the operator of a 160 -acre non-standard proration unit consisting of the 564 of said Section 28 in said Jalmat Gas Pool.
- (6) That said 160 -acre non-standard proration unit is dedicated to the applicant's well No. 3

 located in Unit _____ of said Section 28.
- (7) That the evidence presented demonstrated that said

 **DESTRUCT WELL NO.3 | cannot as effectively and efficiently drain said dedicated 160 acre non-standard proration unit as would a new well to be drilled thereon (said Woolworth Well No. 5) which may be completed and stimulated using modern techniques and processes.
- (8) That the evidence presented further demonstrated that the drilling and completion of applicant's said Woolworth Well No. 5 should result in the production of an additional 175,000 MCF of gas from said non-standard proration unit which would not otherwise be recovered.
- (9) That such additional recovery will result in such unit being more efficiently and economically drained.
- (10) That said Woolworth Well No. 5 is to be drilled as an "infill" well on the existing 160 -acrc non-standard proration unit.
- (11) That in order to permit the drainage of a portion of the reservoir covered by said 160— -acre non-standard proration unit which cannot be effectively and efficiently drained by the existing well thereon, the subject application for infill drilling should be approved as an exception to the standard well spacing requirements for said Jalmat Gas Pool.

IT IS THEREFORE ORDERED:

- authorized to drill his Woolworth Well No. 5 to be located in Unit of Section 28, Township 24 South, Range 37 East, NMPM, as an infill well on an existing 160 -acre non-standard proration unit being the 564 of said Section 28, Jalmat Gas Pool, Lea County, New Mexico. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by the existing 160 -acre non-standard proration unit which cannot efficiently and economically be drained by any existing well thereon.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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