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CASE NO.

6389

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APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,

ETC.

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John G. Jasper  
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NOV 15 1978

November 14, 1978

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

Re: Application of Durham Inc. Case No. 6389

Gentlemen:

On behalf of David Fasken, the operator in Section 9,  
T 21 S, R 24 E, we support the application of Durham  
Inc. in the above referenced case.

We do feel that the Cemetery Morrow Gas Pool should  
be extended to the south line of Section 8, T 21 S,  
R 24 E, NMPM and the Indian Basin Morrow Gas Pool  
contracted accordingly.

Jasper and Buell

By:   
SUMNER G. BUELL

SGB:lp

cc: Richard Brooks, Esq.  
Conrad Coffield, Esq.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
State Land Office Building  
Santa Fe, New Mexico  
21 November 1978

EXAMINER HEARING

IN THE MATTER OF:

Application of Durham, Inc., for  
pool contraction and extension,  
Eddy County, New Mexico.

CASE  
6389

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation  
Division:

Lynn Teschendorf, Esq.  
Legal Counsel for the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

For the Applicant:

Conrad Coffield, Esq.  
HINKLE, COX, EATON, COFFIELD &  
HENSLEY  
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## PETER MICHAELSON

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## LES SKINNER

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1 MR. NUTTER: We'll call next Case 6389.

2 MS. TESCHENDORF: Case 6389. Application of  
3 Durham, Inc., for pool contraction and extension, Eddy  
4 County, New Mexico.

5 MR. COFFIELD: Conrad Coffield with the  
6 Hinkle law firm, appearing on behalf of Durham, Inc.

7 I have two witnesses.

8 (Witnesses sworn.)  
9

10 PETER MICHAELSON

11 being called as a witness and having been duly sworn upon  
12 his oath, testified as follows, to-wit:  
13

14 DIRECT EXAMINATION

15 BY MR. COFFIELD:

16 Q Would you please state your name, address,  
17 occupation and employer?

18 A Peter Michaelson, 2413 Camarie, Midland.  
19 Currently employed by Burham, Incorporated as Exploration  
20 Manager.

21 Q Mr. Michaelson, are you familiar with the  
22 application of Durham, Inc., in this case?

23 A Yes, sir, I am.

24 Q Have you previously testified before the  
25 Oil Conservation Division as a geologist?

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1 A No, I have not.

2 Q All right, would you please outline for the  
3 Examiner a brief history of your educational background and  
4 work experience?

5 A I graduated from the University of Wisconsin  
6 at Madison in 1972 with a Masters degree. Since that time  
7 I've been employed by Getty Oil Company, Tenneco Oil Com-  
8 pany, Texas Oil and Gas, and Durham, Incorporated, and I've  
9 worked at various exploration and development projects in  
10 the Permian Basin.

11 MR. COFFIELD: Are the witness' qualifications  
12 acceptable, Mr. Examiner?

13 MR. NUTTER: Yes, they are.

14 Q Mr. Michaelson, would you please state what  
15 Durham, Inc., seeks by its application?

16 A Durham, Incorporated, seeks the contraction  
17 of the Indian Basin Morrow Gas Pool by the deletion of the  
18 north half of Section 8, Township 21 South, Range 24 East,  
19 Eddy County, New Mexico, or in the alternative, all of  
20 Section 8, and extension of the Cemetery Morrow Gas Pool  
21 to include the north half or all of Section 8.

22 Q All right, Mr. Michaelson, would you please  
23 refer to what's been marked as Exhibit One, identify this,  
24 and explain what it represents?

25 A Exhibit One is a land plat of the Cemetery

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1 and Indian Basin area with the acreage controlled by Durham,  
2 Incorporated, shown in yellow.

3 It also shows other mineral leaseholders in  
4 the area.

5 Q And from this we are showing that Durham,  
6 Incorporated, has -- owns or has control of the north half  
7 as well as the southeast quarter of Section 8.

8 A That is correct.

9 Q All right, Mr. Michaelson, please refer to  
10 what has been marked as Exhibit Two and explain this.

11 A Exhibit Two is my interpretation of the  
12 structure of the Cemetery Pooled area. It is contoured on  
13 top of the main pay in the Cemetery and Indian Basin area.

14 Interpretation shows the north plunging  
15 anticline bounded on the west side by up to the west fault,  
16 which also controls production.

17 It also shows our proposed location in the  
18 north half of Section 8 at a standard 660/1980 location.

19 Q Anything further on this exhibit, Mr.  
20 Michaelson?

21 A Nothing.

22 Q Okay, go on to what's been marked as Exhibit  
23 Three and explain what that represents.

24 A Exhibit Number Three is an Isopach. The main  
25 pay is -- it produces in the Cemetery and Indian Basin Field.

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1 The Cemetery Sand is colored in yellow with  
2 the Indian Basin Sand colored in red.

3 Also indicated here is the respective gas/  
4 water contacts for each sand. In addition the bottom hole  
5 pressures of the main sands at the minus 5700 datum and the  
6 date the pressure obtained, is also present.

7 This sand -- or this map shows our inter-  
8 pretation of this particular area to be two separate reser-  
9 voirs, separated by either shale or an impermeable sand im-  
10 mediately north of the Corinne Grace Well in Section 8.

11 This interpretation of two sands is supported by the dif-  
12 ferent gas/water contacts, as evidenced by the Corinne Grace  
13 Well and the test of water in the David Faskin Mobil 10  
14 Federal, Section 10, at a minus 5700 foot datum for the  
15 Indian Basin Pool.

16 The gas/water contact in the Cemetery Field  
17 is established by the Mobil No. 1 Federal "B" in Section 10  
18 and also by a fault which runs essentially north/south at  
19 the western edge of the field. The fault is substantiated  
20 by the fact that the Depco well in Section 6 is structurally  
21 high and wet to the Shell well in the northern part of  
22 Section 6.

23 This map also shows that the remaining gas  
24 reserves in Section 8 are under the north half of the section  
25 with the south half being most probably water productive.

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1 MR. NUTTER: Mr. Michaelson, I'm looking at --  
2 you're on Exhibit Three, right?

3 A Yes, sir.

4 MR. NUTTER: Okay, I'm on Exhibit Three and  
5 I have this Isopach here colored yellow and this one down  
6 here colored --

7 A Yes, sir.

8 MR. NUTTER: -- pink or something, but these  
9 aren't colored. Now, --

10 A Well, the Cemetery Sand should be colored  
11 yellow and the Indian Basin Sand colored red. I'm sorry.

12 MR. NUTTER: Okay. I'll say red here and  
13 yellow here.

14 Go ahead.

15 Q Anything further on this exhibit?

16 A I have nothing further on this.

17 Q Okay, then go on to Exhibit -- what's been  
18 marked as Exhibit Four, and explain what that is and what  
19 it represents relative to our application.

20 A Exhibit Four is Cross Section A-to-Aprime,  
21 as indicated on Exhibit Three. It is designed to show the  
22 two different sands present in this area.

23 As we start to the south on -- which is called  
24 A-prime, you'll note the David Faskin Skelly Federal is --  
25 has a sand section colored in red, which is interpreted to

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1 be the Indian Basin Sand. The things to note to substantiate  
2 the difference is a very low porosity permeability indicated  
3 in both the David Faskin and Corinne Grace Wells.

4 This also shows the gas/water contact at  
5 approximately a minue 5700 foot datum for this particular  
6 sand.

7 As we go northward, slightly westward, we --  
8 the interpretation shows an impermeable barrier between the  
9 two sands and the proposed location of the Durham Shell  
10 Federal No. 1-8.

11 The proposed location should be structurally  
12 high to the David Faskin Shell Gas Com in Section 5 and  
13 structurally high to the Shell Oil Federal 6 in Section 6.

14 As you go southward from the Shell Federal  
15 6, you cross the fault, which is up to the west and encounter  
16 a water-wet sand in the Depco Shell Federal. We believe it  
17 to be the same sand because of the very similar porosity  
18 and permeability calculations as shown by electric logs.

19 I have nothing further to say about this  
20 cross section.

21 Q All right. Let's go on, then, if you please,  
22 to what has been marked as Exhibit Five and explain what  
23 that exhibit is.

24 A Exhibit Number Five is a stratigraphic section  
25 B-to-Bprime, as illustrated on Exhibit Three.

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1 It is hung on top of the Cemetery Field pay  
2 sand and goes from the Faskin Mobil 10 Federal to the Mobil  
3 No. 1-B Federal, both in Section 10.

4 This cross section is designed to show the  
5 marked differences between the Indian Hills Sand, colored  
6 in red on the left, and the Cemetery Field pay sand, colored  
7 in yellow on the right.

8 Please note the Faskin No. 1 Mobil 10  
9 Federal, the pay section is -- to the equivalent section has  
10 a very tight, limey sandstone at the top with a slightly  
11 cleaner sand beneath it, separated by a shale stringer.  
12 The porosity is very low in both sand members.

13 Also note the very excellent porosity in  
14 the Mobil No. 1-V Federal Unit, which is equivalent to the  
15 Cemetery Field pay sand.

16 Both particular wells are wet but it does  
17 show the marked difference in the two reservoirs.

18 Q All right, now let's go on to Exhibit Six.  
19 Please explain this exhibit and what it represents.

20 A Exhibit Number Six is a log calculation com-  
21 parison between the Indian Basin Field sands to the south  
22 and the Cemetery Field sands to the north.

23 The Group Number One wells include the  
24 Corinne Grace Indian Hills No. 1, in Section 8; the Faskin  
25 Skelly Federal, in Section 9; and the Faskin Mobil 10 Fed-

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1 eral, in Section 10.

2 All three wells are interpreted to be within  
3 the Indian Hills Reservoir and show an average porosity of  
4 90 percent; and average gamma ray API units of 32.

5 In contrast the remaining six wells are in-  
6 terpreted to be in the Cemetery Field area. The Depco and  
7 Shell wells in Section 6; the Faskin wells in Sections 4 and  
8 5; and the Mobil No. 1 Federal V Unit in Section 10.

9 These wells average 16 percent with a gamma ray API unit  
10 of 26. You'll note the comparison between the average  
11 porosities, averaging 7 percent higher, the Cemetery Sand,  
12 and a 6 API unit cleaner on the gamma ray cutoffs; again  
13 designed to show the marked differences between the two  
14 sands.

15 Nothing further on this exhibit.

16 Q Okay. Mr. Michaelson, if this, as you noted,  
17 this application is stated in the alternative, does Durham,  
18 Incorporated, have a preference as to how they would like  
19 for the order, if the Commission sees fit to grant such an  
20 order, he --

21 A We would prefer all of Section 8 to be put  
22 into the Cemetery Pool rather than just the north half to  
23 be put into the pool.

24 Q If the Oil Conservation Division sees fit to  
25 grant the application, does Durham, Incorporated, propose

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1 to drill a well in this section?

2 A Yes, they do, in the north half at a standard  
3 location, as shown on Exhibit Three.

4 Q If the application is approved, will the  
5 change, the proposed change of the field rules, as affects  
6 Section 8, affect the dedication of any producing well?

7 A It will not.

8 Q Mr. Michaelson, were Exhibits One through  
9 Six prepared by you or under your supervision?

10 A Yes, they were.

11 Q And in your opinion, if the application is  
12 granted, would the requested order be in the interest of  
13 prevention of waste, the protection of correlative rights,  
14 and the promotion of conservation?

15 A Yes, it would.

16 MR. COFFIELD: I move the admission of  
17 Applicant Exhibits One through Six, Mr. Examiner.

18 MR. NUTTER: Applicant's Exhibits One through  
19 Six will be admitted in evidence.

20 MR. COFFIELD: And I have no further questions  
21 of this witness on direct.

22  
23 CROSS EXAMINATION

24 BY MR. NUTTER:

25 Q Mr. Michaelson, looking at these two wells

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1 that are presently located in Section 8 and 9, now the  
2 Corinne Grace well on your Exhibit Number Three, appears to  
3 be west of a heavy line which runs southwest-northeast.  
4 What does that line depict? It's at minus 5700.

5 A It depicts the gas/water contact as I inter-  
6 pret it for the Indian Basin Sand in this particular area.

7 Q So then, in your opinion, and based on this  
8 exhibit, there is some Indian Basin Sand present in the  
9 south half of Section 8 but the westernmost two-thirds of  
10 it is under water.

11 A The data for the Corinne Grace well was, as  
12 you probably are aware, very hard to come by and fairly  
13 confusing for the most part. Apparently the Corinne Grace  
14 well has tested the main pay in Section 8; however, it was --  
15 they perforated, you know, many sands within the Corinne  
16 Grace well. The log calculations on that well show just  
17 slightly over 50 percent water saturation for the main pay,  
18 and that's why I interpreted the minus 5700 datum. However,  
19 I would hesitate to condemn the entire south half based on  
20 datum we now have.

21 Q Well now, the well is not producing at the  
22 present time, though?

23 A It's not. I believe its classification is  
24 temporarily abandoned.

25 Q Do you know what the cumulative production on

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1 the well is?

2 A Approximately 209 cubic feet of gas.

3 Q Okay, now how about this well in the southwest  
4 quarter of Section 9? What's the status of it?

5 A The -- that particular well apparently is  
6 producing at a very low volume. Les Skinner, our engineer,  
7 who will testify will have exact data concerning that well.  
8 It's producing from the Indian Basin Sand at just very low  
9 rates at the present time with a cumulative of approximately  
10 2 Bcf.

11 Q About 2-billion. Does it produce water?

12 A I believe it does, yes.

13 Q Now do you have any well that is actually  
14 drilled in this so-called impermeable section?

15 A No, the permeable separation is interpreted  
16 by the -- number one, by the distinct difference in the gas/  
17 water contact of the two sands; also, the log quality of the  
18 two sands is so markedly different that we feel if they were  
19 connected they would have the same gas/water contact.

20 Q There's such a radical difference that you  
21 feel there's some facies change there --

22 A Right, also the ultimate cumulative recoveries  
23 which will be shown in a later exhibit will also illustrate  
24 the different character of the two sands.

25 So just based on the gas/water contact being

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1 radically different, we feel that they have to be -- there  
2 has to be separation, between those wells.

3 I think if I could refer to Exhibit Number  
4 Five, you'll note the Faskin well has a shale streak.

5 Q Now which Faskin well are you referring to?

6 A This is the Faskin No. 1 Mobil 10 on Exhibit  
7 Number Five, the lefthand well.

8 It has a shale stringer right between the  
9 two sands and it's very probable that this shale stringer  
10 could represent the edge of the impermeable separation be-  
11 tween the two sands.

12 Q Now, Durham, Inc., has recently acquired a  
13 lease on the southeast quarter of Section 8, is that correct?

14 A That is correct.

15 Q And I believe that the Marathon and Shell  
16 own the remainder of Section 8, so now does Durham have an  
17 arrangement with Marathon and Shell for the remainder of  
18 those lands in Section 8?

19 A As shown on Exhibit One, we now control the  
20 north half of Section 8 with Marathon retaining their in-  
21 terest in the southwest one quarter.

22 Q I see, so you have leased or farmed out or  
23 something --

24 A That is correct.

25 Q -- the Shell acreage in the north half.

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1 A That is correct.

2 Q And you would seek that the entire Section 8  
3 be deleted from the Indian Basin and placed in the Cemetery  
4 Pool where spacing is 320 acres, is that correct?

5 A That is correct.

6 Q And you would drill a well at -- as shown on  
7 your Exhibit Number Three, in the north half of Section 8  
8 and you would dedicate the north half, I presume.

9 A That is correct.

10 Q Which would leave the south half in the  
11 Cemetery under your proposal but not dedicated to any well.

12 A That is also correct.

13 Q Unless it's dedicated to the Corinne Grace  
14 well.

15 A Well, that's -- we haven't made a final  
16 decision on what to do about the Corinne Grace well. It's  
17 still under study as to whether to plug it, or we assume it  
18 will be plugged.

19 Q Do you have any -- have you made any study  
20 as to whether that well could be of any use to you, to  
21 Durham, or not?

22 A We have reviewed the well and at the present  
23 time with the proposed location we do not feel that it would  
24 be of any use to us right now.

25 Q The Commission at the present time has ad-

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1 vertised the case for December 7th for Corinne Grace and  
2 all interested parties to show cause why that well should  
3 not be ordered plugged and abandoned.

4 Do you feel that Durham, Inc., would show  
5 cause why it shouldn't be plugged and abandoned?

6 A We feel it should be plugged and abandoned.

7 Q You feel it should be.

8 A Yes, sir.

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

11  
12 LES SKINNER  
13 being called as a witness and having been duly sworn upon  
14 his oath, testified as follows, to-wit:

15  
16 DIRECT EXAMINATION

17 BY MR. COFFIELD:

18 Q Please state your name, address, occupation,  
19 and employer.

20 A My name is Les Skinner. My address is 126  
21 Barbara Lane in Midland. I am an engineer and I'm a self-  
22 employed consulting engineer in Midland. I've been retained  
23 by Durham for the purpose of making a study of the subject  
24 area.

25 Q Are you familiar with the application of

1 Durham, Incorporated in this case?

2 A Yes, sir.

3 Q Mr. Skinner, have you previously testified  
4 before the Oil Conservation Division as a petroleum engineer?

5 A Yes, sir.

6 Q And were those qualifications accepted and  
7 are they a matter of record?

8 A Yes, sir, they are.

9 MR. COFFIELD: Is the witness considered  
10 qualified, Mr. Examiner?

11 MR. NUTTER: Yes, he is.

12 Q (Mr. Coffield continuing.) Mr. Skinner,  
13 please refer to what we've marked as Exhibit Three, explain  
14 to the Examiner the engineering details pertinent to the  
15 Durham, Incorporated, application as shown on this exhibit.

16 A All right, sir. Exhibit Number Three con-  
17 tains bottom hole pressure information that I determined  
18 from drill stem tests and initial completion reports on the  
19 wells. Each of the pressure points shown on this plot were  
20 adjusted to a minus 5700 foot datum.

21 The pressures in the Cemetery-Morrow reservoir  
22 are generally higher, as can be seen from the wells going  
23 from west to east. The Depco Shell Federal No. 1 in Section  
24 6, which is across a fault, but it has a reservoir  
25 pressure of 3800 pounds, 3802.

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1 The David Faskin well in Section 5 has a  
2 reservoir pressure of 3807. The Faskin well in Section 4  
3 has a reservoir pressure of 3782, and the Mobil well in  
4 Section 10, the dry hole, has a reservoir pressure of 3840  
5 pounds. Those average about 3803.

6 MR. NUTTER: These were initial pressures  
7 when the well's were completed, is that it?

8 A Yes, sir, that is correct.

9 You will note that I have deleted, in my  
10 illustration, I deleted the well that was drilled in 1976  
11 in Section 6, which was the Shell Federal 6 Well, because  
12 that information -- apparently there has been some drainage.  
13 I'll come back and address that point in just a moment.

14 The wells in the Indian Basin-Morrow reser-  
15 voir are generally a little lower, between 3700 pounds,  
16 roughly, in the Ralph Lowe well in Section 21 to the south,  
17 which was the discovery well in this field, to around 3732  
18 in the Faskin well in Section 17; 3787 in the Faskin well  
19 in Section 16.

20 So, generally the pressures in the two reser-  
21 voirs are slightly different, indicating the presence of  
22 some type of separation between them.

23 The two wells on the east side of the field,  
24 one being the Mobil No. 1 Federal B Unit Well in Section 10,  
25 had a reservoir pressure of 3800 pounds in 1966.

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1 Now, the Faskin well in Section 10 had a  
2 reservoir pressure of only 3360 pounds in 1975. This indi-  
3 cates the possibility of some kind of separation between  
4 the two wells. We show them here as being in two separate  
5 reservoirs.

6 On the west side of the field in Section 6  
7 the Depco well, the southernmost well in Section 6, had a  
8 reservoir pressure of 3802 pounds in November of 1977, com-  
9 pared with the reservoir pressure of 3252 in the Shell  
10 Federal 6 Well in December of 1976. In other words, a  
11 higher pressure at a later point in time, indicating separ-  
12 ation between those two wells.

13 These two separate comparisons confirm the  
14 geological interpretation of Mr. Michaelson, which he's  
15 presented, and that substantiates our Exhibit Number Three.

16 I would point out one further point, which  
17 is the Shell Gas Com Well in Section 5 was an early well in  
18 the field. It had a reservoir pressure of 3807. Now, a  
19 very recent well in the field, Section 6, the Shell Federal  
20 6 No. 1, had a pressure of 3252 in December of 1976. That's  
21 a pressure draw-down of approximately 550 pounds. It is  
22 very likely that if the well in Section 6, the Shell Federal  
23 6 Well, had not been drilled, the reserves in that portion  
24 of the reservoir would not have been recovered by the Faskin  
25 Well. I point this out because the difference between the

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1 nearest well to our proposed location, the Faskin well, if  
2 it couldn't drain this large area, then I doubt that the  
3 reserves in the north half of Section 8 would ever be re-  
4 covered, thereby constituting waste.

5 Q Okay, let's go to what has been marked as  
6 Exhibit Seven and please explain to the Examiner what that  
7 represents.

8 A Mr. Examiner, Exhibit Number Seven contains  
9 information regarding the anticipated recovery from Morrow  
10 wells in this area of New Mexico.

11 The cumulative recoveries came from plots  
12 of P/Z versus cumulative production and are extrapolations  
13 of those.

14 You'll notice that the wells in the Cemetery-  
15 Morrow area generally have significantly higher recoveries  
16 in some of the wells to the south. I point in illustration  
17 to the David Faskin Well in Section 4, which should recover  
18 around 14 Bcf; the Faskin Well in Section 5 should recover  
19 around 12 Bcf; and I compare these with some of the wells  
20 to the south in Section 9, the Faskin Well will recover  
21 about 2 Bcf; in Section 16 the Faskin Well will recover  
22 around 2 Bcf; and in Section 17 the Faskin Well should re-  
23 cover around 3.2 Bcf.

24 Now there are multiple perforations and  
25 that's the meaning of the words "main, middle, or lower."

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1 They constitute a section within the Morrow that has been  
2 perforated.

3 So these data may not be reflective specifi-  
4 cally of the main pay which is the target for our proposed  
5 well in Section 8. But it does again support the fact that  
6 the wells within the Cemetery Field behave differently than  
7 the wells to the south and leads us to believe that there  
8 is -- are two separate reservoirs here.

9 Q Will you please refer to what has been marked  
10 as Exhibit Eight and explain this exhibit and what it re-  
11 presents?

12 A In this exhibit I used log properties, log  
13 defined values of porosity, water saturation, and thickness  
14 of the pay, then used the actual anticipated recovery on the  
15 David Faskin Shell Com No. 1. This is the well in Section  
16 5, and calculated the drainage area using a 12 Bcf ultimate  
17 recovery and the perforated interval of 23 foot section  
18 with a 15 percent porosity, water saturation of 20 percent,  
19 I calculated a drainage area of around 368 acres.

20 MR. NUTTER: And you arrived at your 12-billion  
21 cubic feet total ultimate recovery from a production decline  
22 curve.

23 A P/Z versus cumulative, yes.

24 Q And put that in here and worked backwards to  
25 arrive at 368 acres.

1 A Yes, sir, that's correct.

2 Q Okay.

3 A This again shows that the Faskin well does  
4 not drain a tremendously large area, and I believe that there  
5 are reserves remaining, undrained reserves in Section 8,  
6 in the north half of Section 8.

7 Now we may encounter a lower reservoir pres-  
8 sure than the Faskin wells in Sections 4 and 5 did when  
9 they were originally drilled but we've taken this into  
10 account and still believe that a well is justified in the  
11 north half of Section 8.

12 Q In other words, you don't believe that the  
13 wells presently drilled in the southeast quarter of Section  
14 8 are going to drain all the gas out of that section.

15 A Not a chance.

16 Q Okay, other comments on these exhibits?

17 A No, sir.

18 Q Were these exhibits, Seven and Eight, prepared  
19 by you or under your supervision?

20 A Yes, sir, they were.

21 Q If the application is granted, do you believe  
22 that the order that would be entered along these lines  
23 would be in the interest of prevention of waste, the pro-  
24 tection of correlative rights, and the promotion of conser-  
25 vation?

SALLY WALTON BOYD  
CERTIFIED SHORTHAND REPORTER  
1928 Plaza Blanca (955) 471-4488  
Santa Fe, New Mexico 87501

SALLY WALTON BOYD  
CERTIFIED SHORTHAND REPORTER  
3020 Plaza Blanca (915) 471-2469  
Santa Fe, New Mexico 87501

1 A Yes, sir, I do.

2 MR. COFFIELD: I move the admission of Ex-  
3 hibits Seven and Eight, Mr. Examiner.

4 MR. NUTTER: Applicant's Exhibits Seven and  
5 Eight will be admitted in evidence.

6 MR. COFFIELD: I have no more questions of  
7 this witness on direct.

8  
9 CROSS EXAMINATION

10 BY MR. NUTTER:

11 Q Mr. Skinner, do you see any use to Durham,  
12 Inc., for the well that's presently located in the southeast  
13 quarter of Section 8?

14 A No, sir, I see --

15 Q In the development program that he's pro-  
16 posing?

17 A I'm sorry?

18 Q Under the development program that he's pro-  
19 posing. Now, he's proposing to drill a well in the north  
20 half of Section 3, and he also has a lease on the southeast  
21 quarter. Will this well in the southeast quarter help them  
22 to develop the lands that he owns now?

23 A The Corinne Grace Indian Hills No. 1 Well  
24 holds no potential for commercial production, in my opinion,  
25 sir. Now, when we originally picked the lease on the south-

SALLY WALTON BOYD  
CENTRAL SHORTLAND REPORTER  
2002 Plum, Bldg. (575) 471-4403  
Santa Fe, New Mexico 87501

1 east quarter of Section 8, it was in anticipation of a 640-  
2 acre unit. Since that time we've had a chance to study the  
3 data and we are convinced ourselves that there is a separ-  
4 ation in Section 8, and therefore the Corinne Grace well  
5 is of really very little value to us right now.

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

8 Do you have anything further, Mr. Coffield?

9 MR. COFFIELD: The only thing further I have  
10 to offer to the Examiner is to ask if your file reflects  
11 copies of letters which we have addressed to the Commission,  
12 or the Division, from Mr. Sumner Buell on behalf of David  
13 Faskin as the operator in adjacent acreage; and also from  
14 Mr. Robert Pickens with Marathon Oil Company, both of which  
15 support the application of Durham, Incorporated?

16 MR. NUTTER: We were getting to that. We  
17 do -- did you have anything further?

18 MR. COFFIELD: No, sir.

19 MR. NUTTER: Does anyone have anything fur-  
20 ther in Case Number 6389?

21 MS. TESCHENDORF: We have received letters  
22 from -- on behalf of David Faskin and Marathon Oil Company.  
23 Both support Durham's application in this case and both  
24 request that all of Section 8 be included in the Cemetery  
25 Morrow.

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MR. NUTTER: Thank you.

Does anyone have anything furtherin Case  
Number 6389?

We'll take the case under advisement.

(Hearing concluded.)

SALLY WALTON BOYD  
CALIFORNIA SHORTHAND REPORTER  
2021 Plaza Mexico (906) 471-4668  
San Jose, New Mexico 87501

## 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 CSR  
Sally W. Boyd, C.S.R.

SALLY WALTON BOYD  
CERTIFIED SHORTHAND REPORTER  
3330 Plaza Blanca, Suite 207 411-4499  
Santa Fe, New Mexico 87501

I do hereby certify that the foregoing is  
a complete and correct transcript of the proceedings in  
the examination of Case No. 6387  
heard by me on 11/21 1978.  
[Signature] Examiner  
Oil Conservation Division



**NICK FRANKLIN**  
**SECRETARY**

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

January 2, 1979

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

Mr. Conrad Coffield  
Hinkle, Cox, Eaton,  
Coffield & Hensley  
Attorneys at Law  
P. O. Box 3580  
Midland, Texas 79702

Re: CASE NO. 6389  
ORDER NO. ~~8-5885~~

**Applicant:**

Durham, Inc.

**Dear Sir:**

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

Yours very truly,

**JOE D. RAMEY**  
**Director**

**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. 6389  
Order No. R-5885

NOMENCLATURE

APPLICATION OF DURHAM, INC., FOR  
POOL CONTRACTION AND EXTENSION,  
EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 21, 1978, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 29th day of December, 1978, 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, Durham, Inc., is the owner of certain oil and gas interests in Section 8, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico.
- (3) That said Section 8 is within the currently defined horizontal limits of the Indian Basin-Morrow Gas Pool, which among other lands, includes all of Sections 8, 9, 16, and 17 of Township 21 South, Range 24 East, NMPM.
- (4) That the Cemetery-Morrow Gas Pool, as currently defined, includes all of Sections 4 and 5 and portions of Section 6 of Township 21 South, Range 24 East, NMPM.
- (5) That the applicant seeks the contraction of the Indian Basin-Morrow Gas Pool by the deletion therefrom of all of Section 8, Township 21 South, Range 24 East, NMPM, and the concurrent extension of the Cemetery-Morrow Gas Pool to include therein all of said Section 8.

-2-

Case No. 6389

Order No. R-5885

(6) That the geological evidence presented at the hearing, together with certain reservoir data including pressures and gravity and porosity information, indicate that the reservoir underlying Section 8 of Township 21 South, Range 24 East, NMPM, is indeed a part of the Cemetery-Morrow Gas Reservoir and not the Indian Basin-Morrow Gas Reservoir.

(7) That in order to protect correlative rights and prevent waste, the application should be approved and Section 8, Township 21 South, Range 24 East, NMPM, should be removed from the Indian Basin-Morrow Gas Pool and placed in the Cemetery-Morrow Gas Pool.

IT IS THEREFORE ORDERED:

(1) That the Indian Basin-Morrow Gas Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby contracted by the deletion of the following described lands in Eddy County, New Mexico:

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM  
Section 8: All

(2) That the Cemetery-Morrow Gas Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended by the inclusion therein of the above-described lands.

(3) 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.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
JOE D. RAMEY  
Director

  
S E M L

td/

- CASE 6380:** Application of Harvey E. Yates Company, Inc., for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Travis Deep Well No. 3 located in Unit B of Section 13, Township 18 South, Range 28 East, to produce oil from the Travis-Upper Pennsylvanian Pool and gas from the Morrow formation, Eddy County, New Mexico, through parallel strings of tubing.
- CASE 6381:** Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of East Cottonwood Creek-Wolfcamp and Atoka production within the wellbore of its Lizzie Howard "HK" Well No. 1 located in Unit K of Section 13, Township 16 South, Range 25 East, Eddy County, New Mexico.
- CASE 6382:** Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Permo-Penn and Little Box Canyon-Atoka production within the wellbore of its Federal "HQ" Well No. 1 located in Unit K of Section 5, Township 21 South, Range 22 East, Eddy County, New Mexico.
- CASE 6383:** Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Eagle Creek Permo-Penn and the West Atoka-Morrow production within the wellbore of its Powell "DG" Com. Well No. 1 located in Unit O of Section 35, Township 17 South, Range 25 East, Eddy County, New Mexico.
- CASE 6384:** Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Permo-Penn and Atoka production within the wellbore of its Federal "AB" Com. Well No. 5 located in Unit L of Section 21, Township 18 South, Range 25 East, Eddy County, New Mexico.
- CASE 6385:** Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Box Canyon Permo-Penn and Box Canyon-Strawn production within the wellbore of its Huber I-A Federal Well No. 2 located in Unit P of Section 15, Township 21 South, Range 21 East, Eddy County, New Mexico.
- CASE 6386:** Application of Atlantic Richfield Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Ellenburger, Devonian, and McKee formations underlying the N/2 of Section 21, Township 22 South, Range 36 East, Lea County, New Mexico, to be dedicated to its Langley Greer Com Well No. 1 located 1650 feet from the North line and 1980 feet from the West line of said Section 21. 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 6387:** Application of R B Petroleum Company for pool reclassification, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the reclassification of the North Tocito Dome-Pennsylvanian Pool as an associated pool and the promulgation of special pool rules therefor. In the alternative, applicant seeks the abolishment of the North Tocito Dome-Pennsylvanian Pool and the inclusion of the abolished lands in the Tocito Dome Pennsylvanian "D" Associated Pool.
- CASE 6388:** Application of Amoco Production Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the E/2 of Section 20, Township 23 South, Range 29 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. 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 6389:** Application of Durham, Inc., for pool contraction and extension, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the Indian Basin-Morrow Gas Pool by the deletion therefrom of the N/2 of Section 8, Township 21 South, Range 24 East, Eddy County, New Mexico, or in the alternative, all of said Section 8, and the extension of the Cemetery-Morrow Gas Pool to include the aforesaid N/2 or all of said Section 8.
- CASE 6390:** Application of C & E Operators for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down thru the Pictured Cliffs formation underlying the SW/4 of Section 10, Township 30 North, Range 11 West, San Juan County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. 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.

Docket No. 37-78

Dockets Nos. 39-78 and 40-78 are tentatively set for hearing on December 7 and 20, 1978. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - TUESDAY - NOVEMBER 14, 1978

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

The following cases are continued from the November 7, 1978, Commission Hearing.

CASE 6146: (DE NOVO) (Continued and Readvertised)

Application of Jerome P. McHugh for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Tapacito-Gallup and Basin-Dakota production within the wellbore of his Jicarilla Well No. 5 located in Unit D of Section 29, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

Upon application of Jerome P. McHugh this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 6266: (DE NOVO)

Application of Harvey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of an Upper Pennsylvanian test well to be located 660 feet from the North and East lines or, in the alternative, 990 feet from the North and East lines of Section 23, Township 22 South, Range 23 East, Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico, all of said Section 23 to be dedicated to the well.

Upon application of Harvey E. Yates Company this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 6377: Application of Durham, Inc., for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying Section 8, Township 21 South, Range 24 East, Indian Basin-Morrow Gas Pool, Eddy County, New Mexico, to be dedicated to a well to be drilled 1650 feet from the North and East lines of said Section 8. 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 6378: In the matter of the hearing called by the Oil Conservation Division on the motion of Shell Oil Company to permit Corinne Grace and all other interested parties to appear and show cause why Division Order No. R-3713, which pooled all of Section 8, Township 21 South, Range 24 East, Eddy County, New Mexico, should not be declared null and void, if said pooling order has not already automatically expired due to non-production.

CASE 6379: Application of Shell Oil Company for pool contraction and pool extension, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the Indian Basin-Morrow Gas Pool by the deletion thereof of the N/2 of Section 8, Township 21 South, Range 24 East, Eddy County, New Mexico, or in the alternative, all of said Section 8, and the extension of the Cemetery-Morrow Gas Pool to include the aforesaid N/2 or all of said Section 8.

\*\*\*\*\*

Docket No. 38-78

DOCKET: EXAMINER HEARING - TUESDAY - NOVEMBER 21, 1978

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. Mutter, Examiner, or Richard L. Stanets, Alternate Examiner:

ALLOWABLE: (1) Consideration of the allowable production of gas for December, 1978, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.

(2) Consideration of the allowable production of gas for December, 1978, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

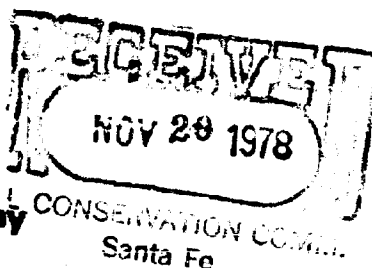
CASE 6391: Application of Acoma Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinbry, Wantz-Abo, and Drinkard production within the wellbore of its Sarkeys Well No. 1 located in Unit A of Section 26, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 6364: (Continued from October 25, 1978, Examiner Hearing)

Application of Adobe Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Ellenburger formation underlying the NW/4 SE/4 of Section 23, Township 20 South, Range 38 East, Lea County, New Mexico, to be dedicated to a proposed oil well to be drilled at a standard location thereon. Applicant seeks the pooling of the SE/4 of said Section 23 in the event said drilling results in a gas well. 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.



**Marathon  
Oil Company**



Robert J Pickens  
Attorney  
Houston Division  
Production US & Canada

PO Box 3128  
Houston Texas 77001  
Telephone 713/629 6600

November 16, 1978

*File  
Case No. 6389  
JRP*

Mr. Dan Nutter, Chief Engineer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Durham, Inc. for Pool Contraction  
and Pool Extension, Eddy County, New Mexico

Dear Mr. Nutter:

It is our understanding that the above mentioned application has been set on the docket for the Examiner's Hearing to be held November 21, 1978. Marathon Oil Company is interested in said hearing in that it holds an oil and gas lease on the southwest quarter of Section 8, Township 21 South, Range 24 East, N.M.P.M., Eddy County, New Mexico.

Marathon concurs that the entirety of Section 8 is geological-ly more closely associated with the Cemetery-Morrow Gas Pool rather than with the Indian Basin-Morrow Gas Pool. Marathon has no objection to the granting of applicant's petition for pool contraction and pool extension, provided that all of Section 8, T-21-S, R-24-E, is included within the Cemetery-Morrow Gas Pool.

Yours very truly,

ROBERT J. PICKENS  
Attorney

RJP:gt

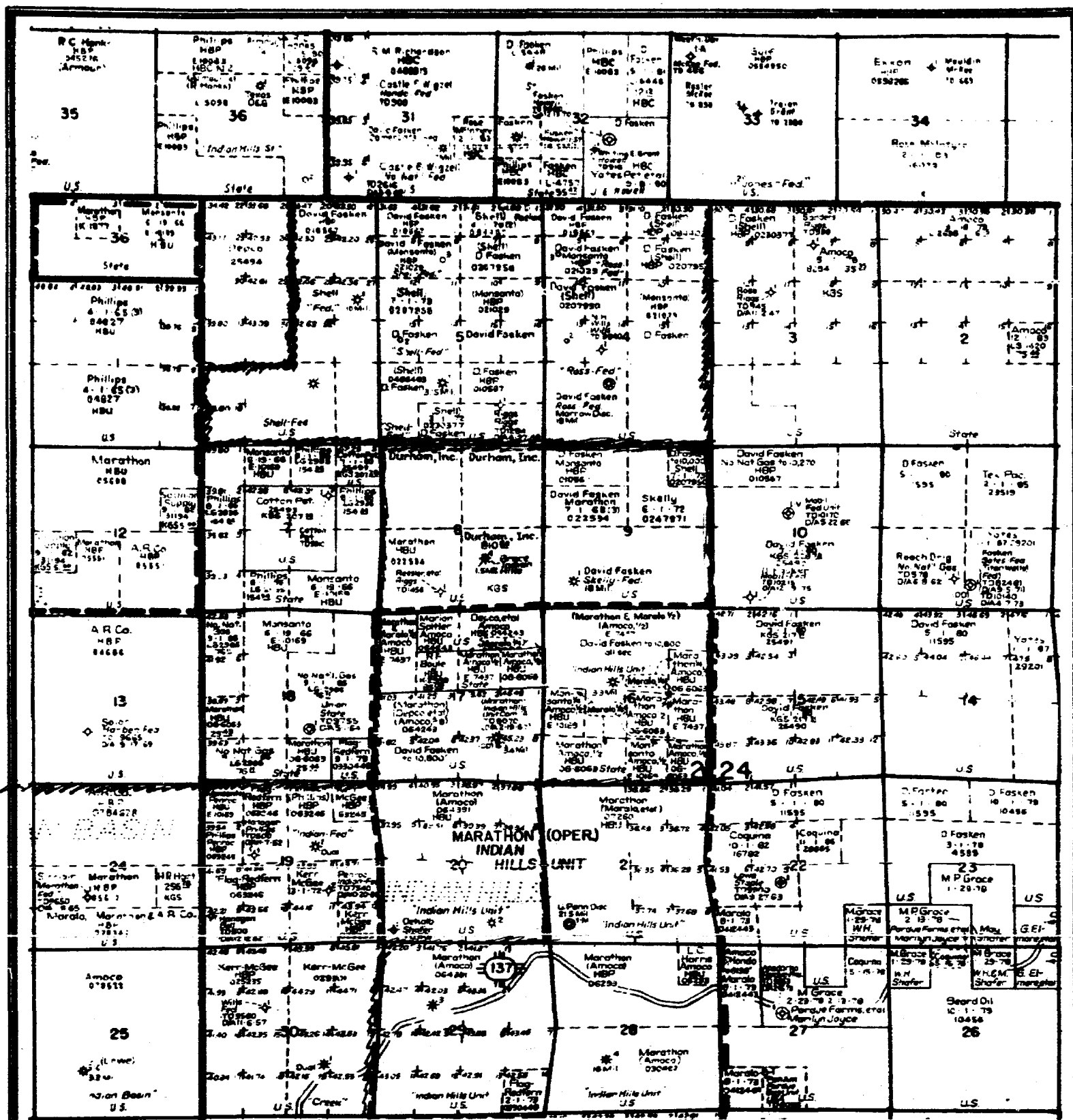


EXHIBIT NO. 1  
 CASE NO. 6389

DURHAM INC  
 Midland, Texas  
 INDIAN BASIN  
 CEMETARY FIELD AREA  
 EDDY COUNTY, NEW MEXICO  
 LAND PLAT  
 Scale: 1" = 4,000'  
 Nov., 1978

GROUP NO. 1 WELLS  
INDIAN BASIN AREA

GRACE  
INDIAN HILL No. 1  
 $\emptyset = 9\%$   
G/R API = 45

FASKEN  
SKELLY FED. No. 1  
 $\emptyset = 8\%$   
G/R API = 22

FASKEN  
FED. 10-1  
 $\emptyset = 10\%$   
G/R API = 30

AVG.  $\emptyset = 9\%$   
AVG. G/R API = 32

GROUP NO. 2 WELLS  
CEMETARY FIELD AREA

DEPCO  
No. 1 SHELL FED.  
 $\emptyset = 12\%$   
G/R API = 25

FASKEN  
ROSS FED. No. 1  
 $\emptyset = 11\%$   
G/R API = 25

FASKEN  
SHELL GAS CON. No. 1  
 $\emptyset = 15\%$   
G/R API = 25

MOBIL  
FED. "V" UNIT No. 1  
 $\emptyset = 18\%$   
G/R API = 20

SHELL  
FED. 6 No. 1  
 $\emptyset = 18\%$   
G/R API = 35

COTTON  
FED. 7 No. 1  
 $\emptyset = 16\%$   
G/R API = 26

AVG.  $\emptyset = 16\%$   
AVG. G/R API = 26

BEFORE EXAMINER'S SIGNATURE
OIL CLAIMS DIVISION
INDEX NO. <u>6</u>
CASE NO. <u>6387</u>

# RESERVE ESTIMATE - GAS RESERVOIR

Operator David Fasken Well Name & No. Shell Gas Com. #1  
 Location 1980' FS & WL's, Sec 5, T-21-S, R-24-E  
 Field Cemetary (Morrow) County Eddy State N. M.

## Reservoir Data

Initial BHP	<u>3778</u>	+Press. Base =	<u>3778</u>	psia	
Abandonment BHP	<u>200</u>	+Press. Base =	<u>213</u>	psia	
BH Temperature	<u>161</u>	+	<u>460</u>	=	<u>621</u> °R
Gas Gravity	<u>.600</u>	:	<u>Pc</u>	=	<u>671</u> psia
Log - $\phi$ =	<u>.15</u>				<u>Tc</u> <u>358</u> °R
F =					
Log - Rt =					
@RW = Sw =	<u>20</u>				
Thickness	<u>28</u>				

$$\text{ORIG } Z: P_r = \frac{P}{P_c} = \left( \frac{3778}{671} \right) = 5.63 \quad T_r = \frac{T}{T_c} = \left( \frac{621}{358} \right) = 1.73 \quad \therefore Z_o = .915$$

$$\text{ABAND } Z: P_r = \left( \frac{213}{671} \right) = .32 \quad T_r = \left( \frac{\quad}{\quad} \right) = 1.73 \quad \therefore Z_a = .980$$

$$B_{go} = \frac{35.35 P}{Z_o T} = \frac{35.35 (3778)}{(.915) (621)} = 235.0 \text{ SCF/FT}^3$$

$$B_{ga} = \frac{35.35 P}{Z_a T} = \frac{35.35 (213)}{(.98) (621)} = 12.4 \text{ SCF/FT}^3$$

$$\Delta B_g = 222.6 \text{ SCF/FT}^3$$

## ULTIMATE RECOVERY

$$= 43.560 \times \phi \times (1 - S_w) \times \Delta B_g \times \text{Acres} \times \text{Ft.} \quad \text{/Unknown}$$

$$= 43.560 (.15) (1 - .20) (222.6) ( ? ) ( 28 ) = 12,000,000 \text{ MCF}$$

$$= 43.560 ( . ) ( 1 - . ) ( ) ( ) ( ) = \text{MCF}$$

$$= 43.560 ( . ) ( 1 - . ) ( ) ( ) ( ) = \text{MCF}$$

$$= 43.560 ( . ) ( 1 - . ) ( ) ( ) ( ) = \text{MCF}$$

TOTAL RESERVES =                      MCF

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

EXHIBIT NO. 8

Drainage Area = 368 AC

CASE NO. 6389

RECEIVED  
NOV 13 1978  
LAW OFFICES  
HINKLE, COX, EATON, COFFIELD & HENSLEY  
1000 FIRST NATIONAL BANK TOWER  
POST OFFICE BOX 3580  
MIDLAND, TEXAS 79702  
(915) 683-4891

DOUGLAS L. LINSFORD  
PAUL M. BOHANNON  
J. DOUGLAS FOSTER  
K. DOUGLAS PERRIN  
C. RAY ALLEN  
JACQUELINE W. ALLEN  
T. CALDER EZZELL, JR.

November 7, 1978

OF COUNSEL  
CLARENCE E. HINKLE

W. E. BONDURANT, JR. (1944-1973)

ROSWELL, NEW MEXICO OFFICE  
800 HINKLE BUILDING  
(505) 422-6510

ONLY ATTYS. COFFIELD, MARTIN,  
BOZARTH, BOHANNON, FOSTER, ALLEN & ALLEN  
LICENSED IN TEXAS

Mr. Dan Nutter  
Chief Engineer  
Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Dear Dan:


Transmitted herewith you will find triplicate executed copies of an Application for Durham, Inc. for pool contraction and pool extension in Eddy County, New Mexico.

It is my understanding that the docket setting for November 21 is still available for this matter, and accordingly, we request that it be heard on that date.

I trust that the enclosed copies of the Application are all that is needed in order for this to be set for the November 21 hearing. However, if anything is needed in addition, please let me know.

Very truly yours,

HINKLE, COX, EATON,  
COFFIELD & HENSLEY

  
Conrad E. Coffield

CEC:rf  
Enclosures

xc: Mr. Peter Michelson  
Durham, Inc.  
Post Office Box 273  
Midland, Texas 79702  
xc: Mr. Fred Durham  
Durham, Inc.  
Post Office Box 273  
Midland, Texas 79702  
xc: Mr. A. W. Hanley  
Marathon Oil Company  
Post Office Box 552  
Midland, Texas 79702

BEFORE THE OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

APPLICATION OF DURHAM, INC. )  
FOR POOL CONTRACTION AND )  
POOL EXTENSION, EDDY COUNTY, )  
NEW MEXICO )

Case 6389

Durham, Inc., by its undersigned attorneys, hereby makes application for an Order to contract the Indian Basin-Morrow Gas Pool by the deletion therefrom of the N $\frac{1}{2}$  of Section 8, Township 21 South, Range 24 East, N.M.P.M., Eddy County, New Mexico, or the deletion of All of said Section 8 and to extend the Cemetery-Morrow Gas Pool to include the afore-said N $\frac{1}{2}$  or All of said Section 8, Township 21 South, Range 24 East, N.M.P.M., Eddy County, New Mexico, and in support thereof would show:

1. That pursuant to Order No. R-3713, all mineral interests in the Morrow formation underlying Section 8, Township 21 South, Range 24 East, N.M.P.M., Indian Hills, Eddy County, New Mexico, were pooled to form a 640-acre proration unit dedicated to a well drilled 1650 feet from the South line and 1750 feet from the East line of said Section 8.

2. That Corinne Grace was dedicated the operator of subject well and unit.

3. That said lease expired by its own terms on August 31, 1976 for failure to produce.

4. That the geological structure pertaining to the N $\frac{1}{2}$  of said Section 8, or in the alternative, all of Section 8 is more clearly associated with the Cemetery-Morrow Gas Pool lying directly to the North of said Section 8 than it is with the Indian Basin Gas Pool in which it is presently located.

5. That the pool rules of the Cemetery-Morrow Gas Pool formation provide for 320-acre spacing proration units as compared to the 640-acre spacing proration units provided for in the rules governing the Indian Basin-Morrow Gas Pool.

6. That in the event this Application is granted, the Applicant intends to dedicate the N $\frac{1}{2}$  of said Section 8 to a proration unit in the Cemetery-Morrow Gas Pool and to develop said half section in accordance with the rules and regulations of the Oil Conservation Division.

7. That the granting of this Application is in the interest of the prevention of waste and the protection of correlative rights.

WHEREFORE, Applicant respectfully requests the Division to grant an extension of the Cemetery-Morrow Gas Pool to include the N $\frac{1}{2}$  of Section 8, or in the alternative, All of Section 8, Township 21 South, Range 24 East, N.M.P.M., Eddy County, New Mexico, and for an Order contracting the Indian Basin-Morrow Gas Pool to delete the N $\frac{1}{2}$  of Section 8, or in the alternative, All of Section 8, Township 21 South, Range 24 East, N.M.P.M., Eddy County, New Mexico.

HINKLE, COX, EATON,  
COFFIELD & HENSLEY

By:



Conrad E. Coffield  
Post Office Box 3580  
Midland, Texas 79702  
Attorneys for Durham, Inc.

Conrad Coffin 11-2-28

1845

Application of Durham, Inc. appl as  
Per Shell Oil Co is cert 6379  
No set for Nov 21, 1928.

ROUGH

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:

*JEP* CASE NO. 6389

Order No. R-5885

*JEP* APPLICATION OF DURHAM, INC., FOR  
POOL CONTRACTION AND EXTENSION,  
EDDY COUNTY, NEW MEXICO

NOMENCLATURE

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 21  
19 78, at Santa Fe, New Mexico, before Examiner DSN

NOW, on this \_\_\_\_\_ day of December, 19 78, 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, Durham, Inc., is the owner of certain oil and gas interests in Section 8, Township 21 South, Range 24 East, <sup>NMPM</sup> Rddy County, New Mexico.
- (3) That said Section 8 is within the <sup>currently defined</sup> horizontal limits of the Indian Basin-Morrow Gas Pool, which among other lands, includes all of Sections 8, 9, 16, and 17 of Township 21 South, Range 24 East, NMPM.
- (4) That the Cemetery-Morrow Gas Pool, as currently defined, includes all of Sections 4 and 5 and portions of Section 6 of Township 21 South, Range 24 East, NMPM.
- (5) That the applicant seeks the contraction of the Indian Basin-Morrow Gas Pool by the deletion therefrom of all of Section 8, Township 21 South, Range 24 East, NMPM, and the concurrent extension of the Cemetery-Morrow Gas Pool to include therein all of said Section 8.
- (6) That the geological evidence presented at the hearing, together with certain reservoir data including pressures <sup>and</sup> gravity and porosity information, indicate <sup>that the reservoir underlying</sup> that Section 8 of Township 21 South, Range 24 East, NMPM, is indeed a part of the Cemetery-Morrow Gas Reservoir and not the Indian Basin Morrow Gas Reservoir. ~~as currently~~
- (7) That in order to protect correlative rights and prevent waste, the application should be approved and Section 8, Township 21 South, Range 24 East, NMPM,

should be removed from the Indian Basin-Morrison Gas Pool and placed in the Cemetery-Morrison Gas Pool.

IT IS THEREFORE ORDERED:

(1) That the Indian Basin ~~the~~ Morrison Gas Pool in Eddy County, New Mexico, as ~~presently~~ heretofore classified, defined, and described, is hereby contracted by the deletion of the following ~~the~~ described lands in Eddy County, New Mexico:

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMAP  
Section 8: A-11

(2) That the Cemetery-Morrison Gas Pool in Eddy County, New Mexico as heretofore classified, defined, and described, is hereby extended by the inclusion herein of the above-described lands.

(3) Jurisdiction.

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**Amberg**

*Continued to  
January 17th*

*Dennis*

CASE 6390: C & E OPERATORS FOR COMPUT-  
SORY POOLING, SAN JUAN COUNTY, NEW  
MEXICO