CASE 7214: PIONEER PRODUCTION CORPORATION FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO

CASE NO.

7214

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
8 April 1981

IN THE MATTER OF:

Application of Pioneer Production Company for dowhole commingling, San Juan County, New Mexico.

CASE 7214

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant: Tommy Roberts, Esq.
P. O. Box 208
Farmington, New Mexico 87401

I N D E X

E X H I B I T S

MR. STAMETS: The hearing will please come to order.

We'll call next Case 7214.

MR. PADILLA: Application of Pioneer Production Corporation for downhole commingling, San Juan County, New Mexico.

MR. ROBERTS: Tommy Roberts, general counsel for Dugan Production Corporation, P. O. Box 208, Farmington, New Mexico, on behalf of Pioneer Production Corporation.

I have one witness.

(Witness sworn.)

THOMAS A. DUGAN

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

DIRECT EXAMINATION

BY MR. ROBERTS:

Q. Would you state your name, address, and your occupation, please?

A. Thomas A. Dugan, 907 Hallett Circle, Farmington, New Mexico. I'm a consulting petroleum engineer

with Pioneer Production Corporation.

Q. Mr. Dugan, are you familiar with the application?

A. Yes.

Q. Have you testified before the New Mexico Oil Conservation Division?

A. Yes.

Q. In what capacity?

A. As a consulting petroleum engineer.

MR. ROBERTS: Are the witness' qualifications as a petroleum engineer, expert petroleum engineer, a matter of record and accepted?

MR. STAMETS: They are.

Q. Mr. Dugan, would you briefly describe the purpose of this application?

A. Pioneer Production Corporation desires to produce the Dakota formation and the Chacra formation commingled downhole in the Dustin No. 1E Well, which is located in Unit J of Section 6, Township 29 North, Range 12 West, San Juan County, New Mexico.

Q. What is the current status of that well?

A. The well is currently shut in awaiting pipeline connection.

Q. Mr. Dugan, would you look at what has been marked as Exhibit Number One and identify that exhibit and explain its significance?

A. Okay. Exhibit Number One, we'd like to show two things by this exhibit, one, the location of the well and its proximity to Farmington, just east of Farmington.

And also, that it's in an area of -- that has been developed on 320 acres in the Dakota formation. It's now -- quite a few infill wells are being drilled in this vicinity. The well in question is a Dakota infill well.

We'd also like to show that the Chacra formation is not developed in the area. The red dots around Bloomfield are the closest Chacra wells that have been completed, so this was at least a 7-mile step out for the Chacra formation.

Q. Would you look at what has been marked as Exhibit Number Two and identify that exhibit and explain its significance to the application?

A. This is -- shows the Dakota wells in the area of the Dustin 1E Well, and it shows who are the operators of the Dakota wells.

Q. Please identify what's been marked as Exhibit Number Three and explain its significance.

A. Okay. Exhibit Number Three is the same

plat as we just showed, showing the offset operators; however, on this plat we have shown the cumulative production to 1/1/80 of the Dakota wells in the vicinity of the Dustin 1E, and indicate that these wells have been on production for some time and have a substantial cumulative production.

Also it indicates that the oil production from the Dakota formation is fairly substantial and it is shown in green; that is the cumulative oil production.

So it indicates the Dakota producing area around the Dustin 1E.

Q. And what conclusions can you draw from these figures in relation to the need for downhole commingling?

A. Well, that the Dakota formation does produce condensate and that the, it would be desireable to commingle downhole to lift that condensate.

Q. Would you identify what's been marked as Exhibit Number Four?

A. It is the daily drilling report of the Dustin 1E Well, merely showing how the well was drilled and completed in detail.

It's just submitted as reference only.

Q. Please identify what's been marked as Exhibit Number Five and explain the significance to the Examiner.

A. It's a diagrammatic sketch of the Dustin 1E wellbore, showing where the casings were set; showing the Chacra perforations and the Dakota perforations; showing that we have run one string of tubing in the wellbore, set at 5959 with a Baker Model F production packer at 2766 and a Baker Model L sliding sleeve valve at 2763.

It shows that the Dakota is -- will produce through the tubing and that the Chacra will have to produce through the tubing-casing annulus.

Q. How does the manner of completion relate to the need for downhole commingling?

A. The Chacra formation producing through the tubing-casing annulus will not be able to lift the produced fluids, which were principally water, associated with the gas production, a small amount of water. The well will probably log off and impair production from the Chacra formation. So for this reason we're asking permission to commingle the well downhole.

Q. Would you identify Exhibit Number Six and explain its significance?

A. Exhibit Number Six is the reservoir data available from the Dustin 1E, showing that the Chacra formation has a bottom hole pressure of 921 psia and the Dakota formation has a bottom hole pressure of 1342 psia, and

it also shows the porosity and connate water estimates taken from the logs.

Q. In your opinion are these reservoir pressures compatible?

A. Yes.

Q. Would you please refer to Exhibit Number Seven and summarize the contents of that exhibit?

A. This is the way that Pioneer Production Corporation proposes to allocate the production from each zone when it is downhole commingled.

We would propose that 59 percent of the gas from the Dakota formation, and be allocated to the Dakota formation, and that 41 percent of the gas be allocated to the Chacra formation.

Q. Mr. Dugan, could you briefly characterize or describe the volume of liquid production from each zone?

A. It is obvious from the cumulative production, the Dakota formation, of the other wells surrounding this area, it produces approximately 10 barrels of condensate per million from the Dakota. While we don't have a lot of information on this particular well from the Chacra formation, reviewing Chacra wells in the San Juan Basin indicates very little, if any, condensate production from the Chacra formation. So we would propose that 100

percent of the condensate production be allocated to the Dakota formation and zero percent of the condensate production be allocated to the Chacra formation. Both zones will produce a small amount of formation water.

Q. Okay. Mr. Dugan, speaking in terms of economics, is it necessary to commingle the production from these zones?

A. It would be very desireable economically to commingle the production, principally because the Chacra formation will be impaired because it's not able to lift the produced fluids, and it will result in a considerable amount of additional production from the Chacra formation if we are able to commingle downhole.

Q. Is the ownership of the two zones common?

A. The working interest ownership is 100 percent Pioneer Production Corporation for both zones; however, the allocated -- the proration unit for the Dakota formation is 320 acres while the proration unit for the Chacra formation is 160 acres, which results in some of the royalties and overriding royalties being different in each horizon.

Q. Would you refer to what's been marked as Exhibit Number Eight, which I don't believe yours is marked, but --

A. Yeah.

Q. Okay, yours is marked as Exhibit Number Eight?

A. Yeah. This is the induction log, IES log that was run on the Dustin 1E and we have marked the perforations from -- in the Dakota and Chacra formations, so -- for the information of the Commission.

Q. Were Exhibits Number One through Eight either prepared by you or at your direction and under your supervision?

A. Yes.

MR. ROBERTS: Move that Exhibits One through Eight be admitted into the record.

MR. STAMETS: These exhibits will be admitted.

Q. Mr. Dugan, in your opinion will the commingling of production in the wellbore of this well result in the recovery of additional hydrocarbons, the prevention of waste, and the protection of correlative rights?

A. It will definitely result in the production of additional hydrocarbons from the Chacra formation and -- yes.

MR. ROBERTS: I have no other questions.

CROSS EXAMINATION

BY MR. STAMETS:

Q. Mr. Dugan, I presume at the present time that this well is completed as a dual with each zone being produced separately?

A. Presently the well is shut in but it is, as indicated on our diagrammatic sketch, each zone is separated with a packer between the two zones and one string of tubing in the wellbore.

Q. If required, you could test the Dakota zone for an additional period of time separately and then achieve your commingling and test the two zones together?

A. Yes.

Q. And this then could be the basis for the allocation of production, if that was the decision?

A. Yes. Yes, we could do that.

Q. Okay. Now what will you do to commingle the production in this well?

A. Open the sliding sleeve valve that is shown on the diagrammatic sketch right above the packer.

Q. What line pressure is in this area?

A. About 250 pounds.

MR. STAMETS: Any other questions of

the witness? He may be excused.

Anything further in this case?

The case will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

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. 7214, heard by me on 4-8, 1981.

Richard L. Stamets, Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
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MR. STAMETS: Any other questions of

the witness? He may be excused.

Anything further in this case?

The case will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

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. _____, heard by me on _____ 19____.

_____, Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

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

April 15, 1981

Mr. Tommy Roberts, Attorney
Dugan Production Corporation
709 Bloomfield Road
Farmington, New Mexico 87401

Re: CASE NO. 7214
ORDER NO. R-6653

Applicant:

Pioneer Production Corporation

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 OCD x
Artesia OCD x
Aztec OCD x

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. 7214
Order No. R-6653

APPLICATION OF PIONEER PRODUCTION
CORPORATION FOR DOWNHOLE COMMINGLING,
SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on April 8, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 14th day of April, 1981, 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, Pioneer Production Corporation, is the owner and operator of the Dustin Well No. 1E, located in Unit J of Section 6, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico.

(3) That the applicant seeks authority to commingle Chacra and Basin-Dakota production within the wellbore of the above-described well.

(4) That from the Chacra zone, the subject well is capable of low rates of production only.

(5) That from the Basin-Dakota zone, the subject well is capable of low rates of production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the well, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pioneer Production Corporation, is hereby authorized to commingle Chacra and Basin-Dakota production within the wellbore of the Dustin Well No. 1E, located in Unit J of Section 6, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in the subject well.

(3) That the operator of the subject well shall immediately notify the Division's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

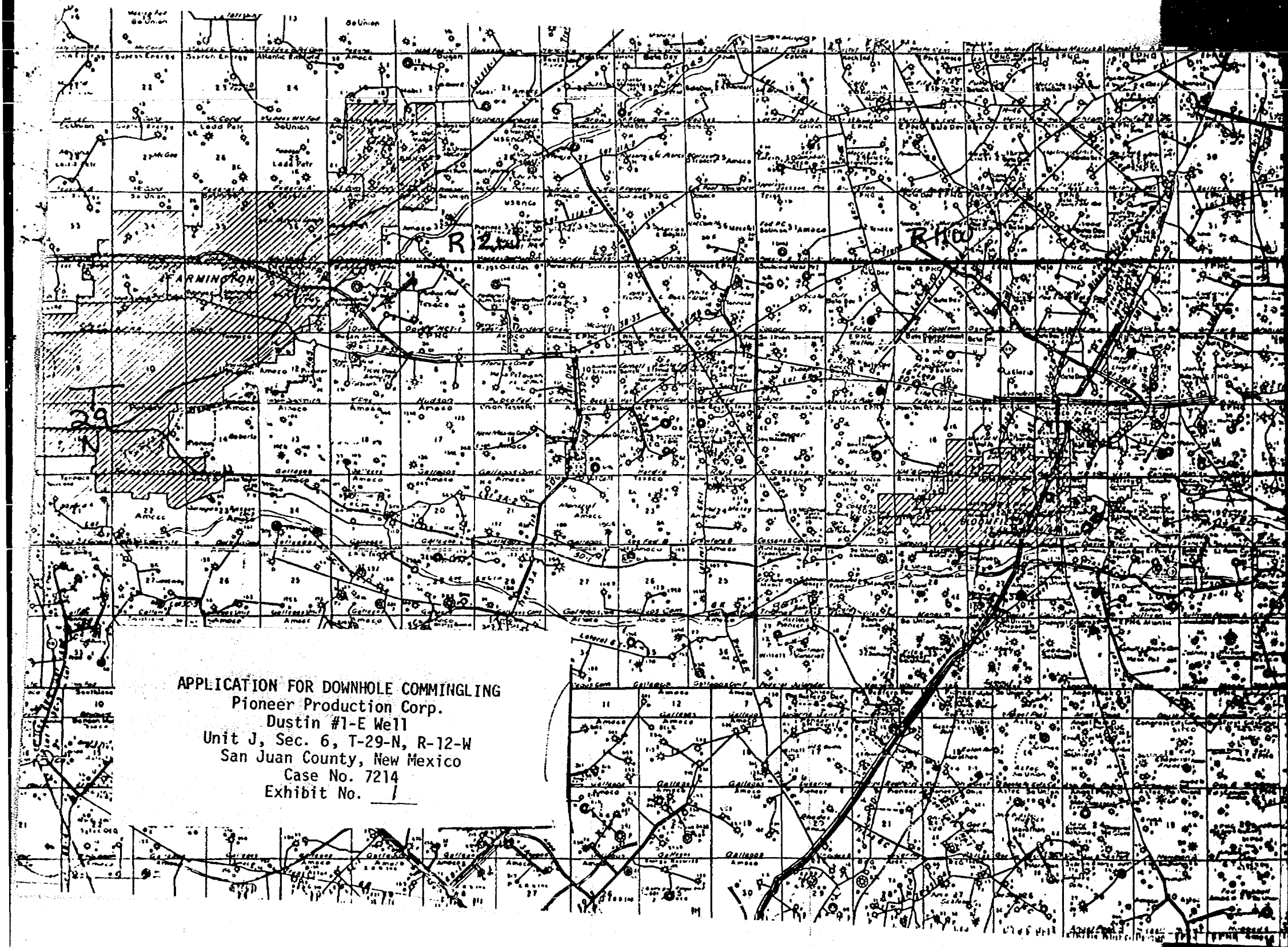
(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

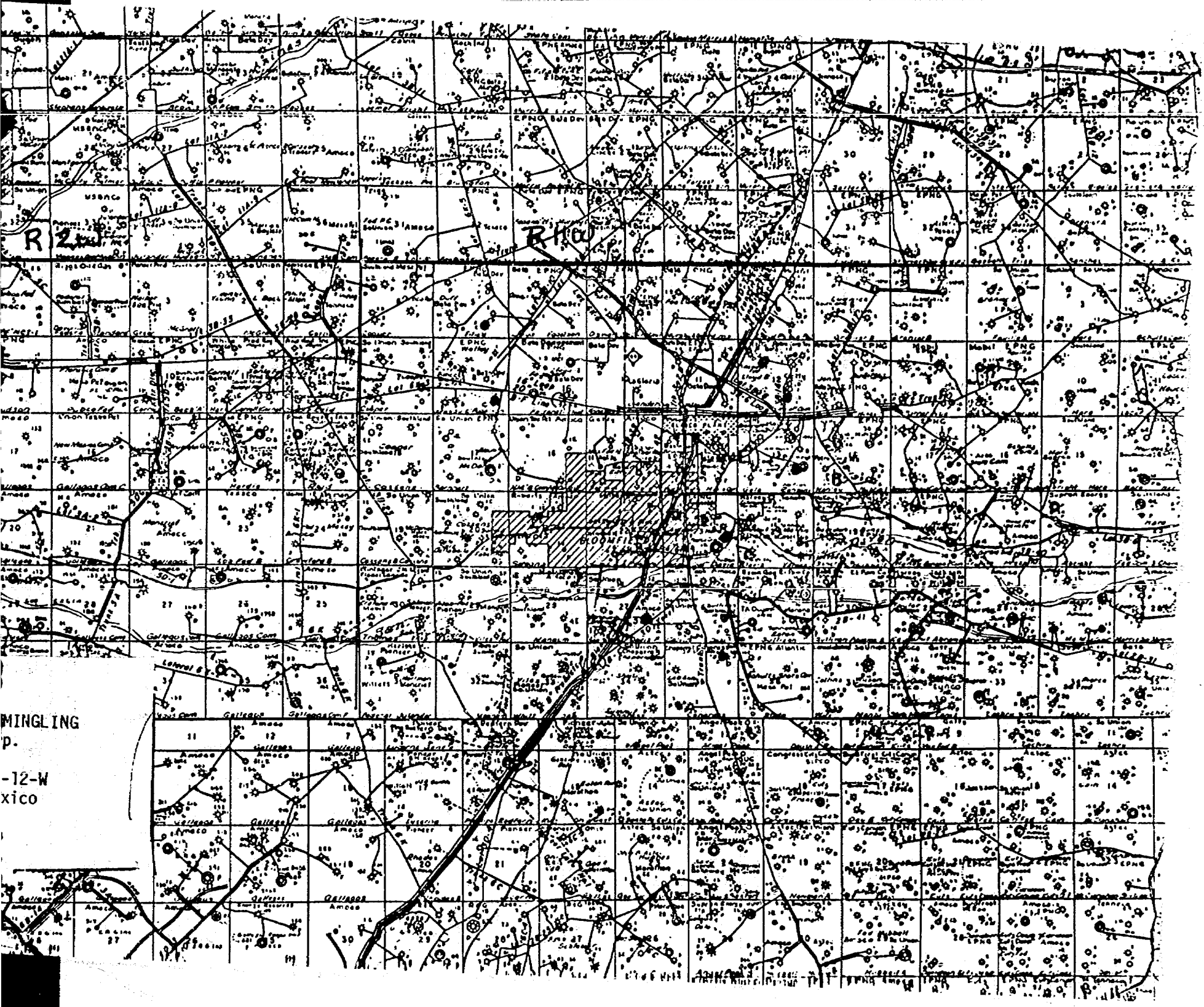
STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY
Director

S
fd/



APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 1



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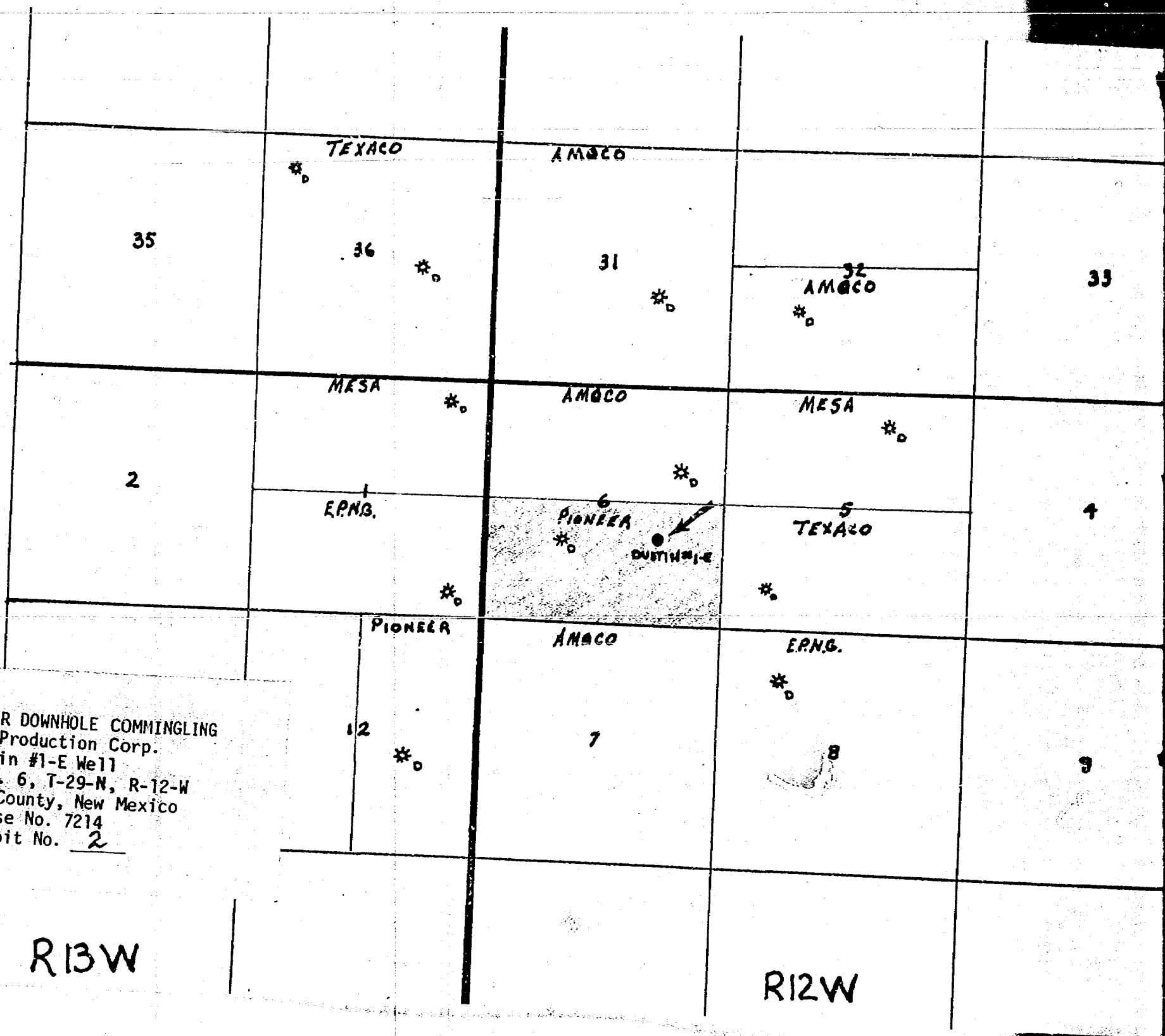
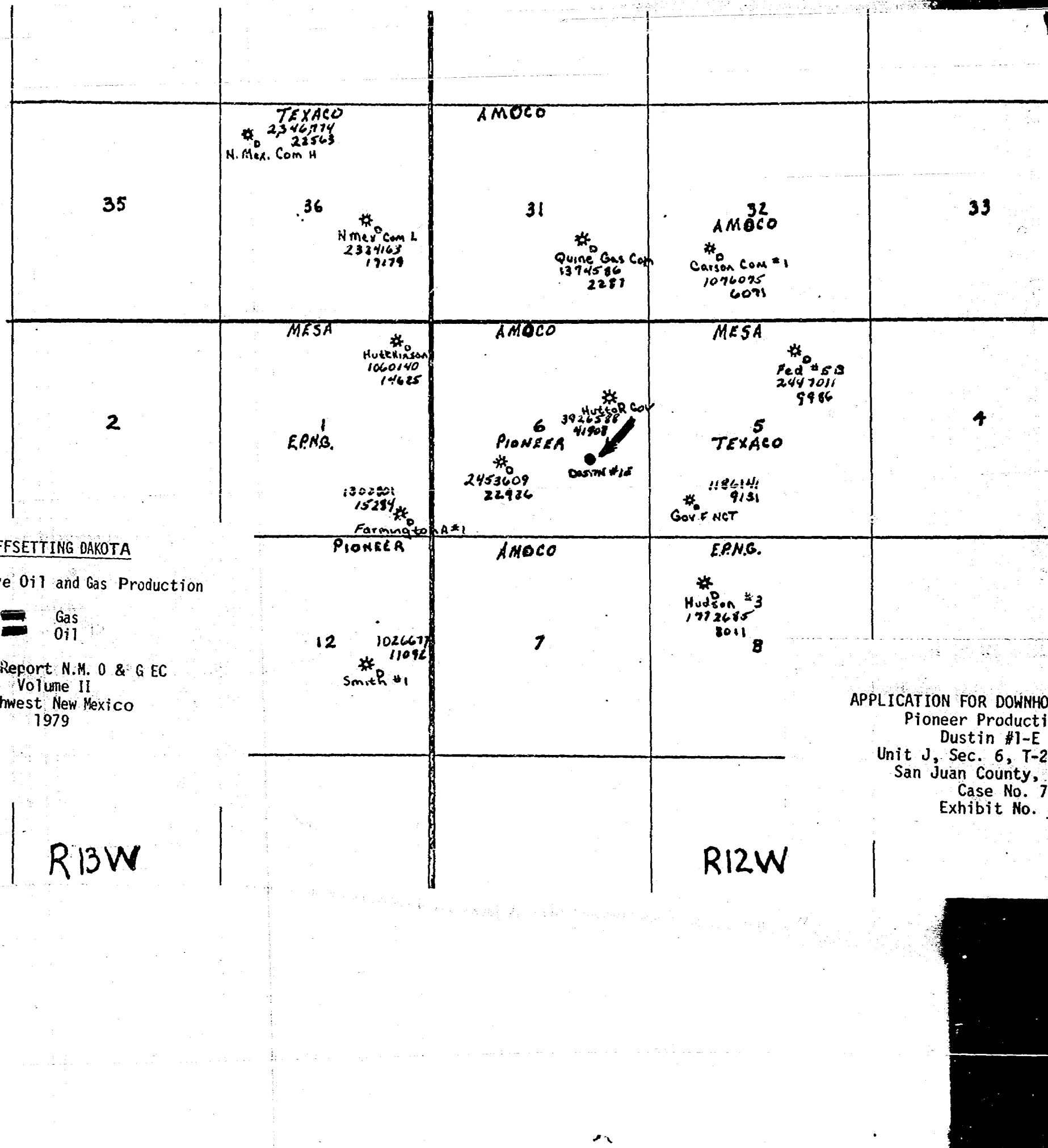


APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 2

TEXACO	AMOCO			
36	31	32 AMOCO	33	T 30 N
MESA	AMOCO	MESA		
1 E.P.N.G.	6 PIONEER DUSTIN #1-6	5 TEXACO	4	T 29 N
PIONEER	AMOCO	E.P.N.G.		
GLING 12	7	8	9	
W				
		R12W		



OFFSETTING DAKOTA

Accumulative Oil and Gas Production

Gas
Oil

Annual Report N.M. O & G EC
Volume II
Northwest New Mexico
1979

APPLICATION FOR DOWNHO
Pioneer Producti
Dustin #1-E
Unit J, Sec. 6, T-2
San Juan County,
Case No. 7
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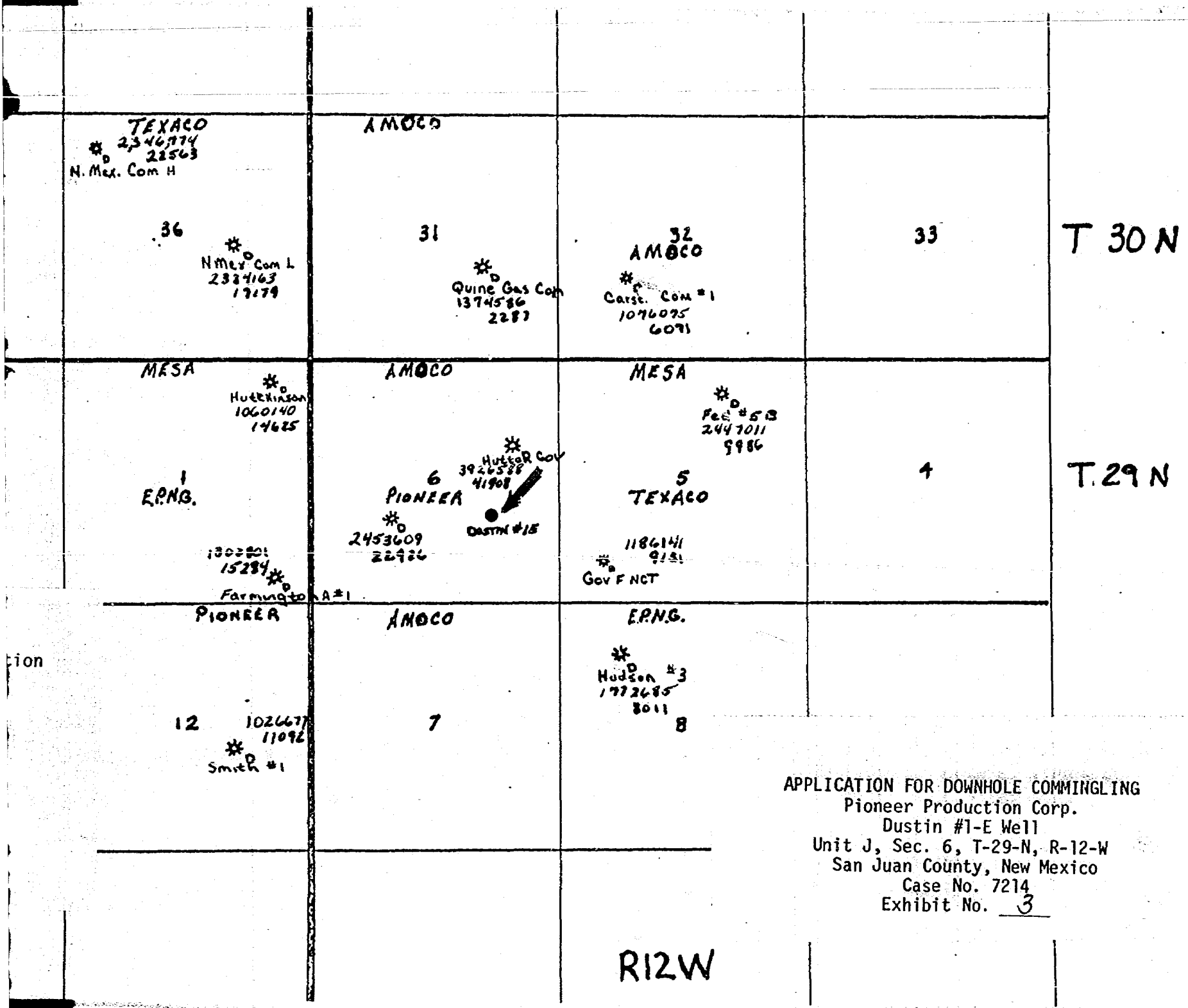

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Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 3

dugan production corp.

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 4

PIONEER PRODUCTION CORP.
Dustin #1E
1850' FSL - 1520' FEL
Sec 6 T29N R12W
San Juan County, NM

MORNING REPORT

1-13-81 Moved in and rigged up Four Corners Rig #10. Spudded at 3:30 p.m. 1-12-81. Drilled 12¼" hole to 436'. Ran 10 jts. 8-5/8" OD, 24#, K-55 8 Rd ST&C csg. T.E. 411.60' set at 423' RKB. Now cementing csg. 1¼° at 436'

6 hrs - drlg.
3-1/2 hrs - drill rat & mouse holes
10-1/2 hrs - drlg.
3/4 hr - repairs
1/4 hr - survey
1 hr - trip
1-1/2 hrs - run 8-5/8" csg.

1-14-81 1430' - Drlg. w/ wtr. & Benix 1° at 934'; 1° at 1306'
Cemented 8-5/8" surface csg. w/ 275 sx class "B" plus 2% CaCl. POB at 6:30 a.m. 1-13-81. Cement circulated approx. 2 bbls.

8-1/2 hrs - drlg.
2-1/4 hrs - trip
1/4 hr - survey
1/2 hr - cement surface csg.
12-1/4 hrs - WOC
1/4 hr - wash to btm.

1-15-81 3048' - Drlg. w/ wtr. & Benix. 3/4° at 2405'; 3/4° at 2723'

22-1/4 hrs - drlg.
3/4 hr - rig service
1 hr - survey

1-16-81 4144' - Drlg. w/ wtr. & Benix 3/4° at 3423'; 3/4° at 3754'

19 hrs - drlg.
3-1/2 hrs - trip
3/4 hr - rig service 1/4 hr - wash to btm.
1/2 hr - survey

1-17-81 5071' - Drlg. Wt. 8.9 Vis 35 3/4° at 4974'

22-3/4 hrs - drlg.
3/4 hr - rig service
1/2 hr - survey

(Lost 75 bbls mud at 5025')

1-18-81 5800' - Drlg. Wt. 9.0 Vis 35 W.L. 10.2 3/4° at 5476'

23 hrs - drlg.
3/4 hr - rig service
1/4 hr - survey

1-19-81 6174' - Drlg. Wt. 9.1 Vis 70 W.L. 10.2 1° at 5980'
1° at 6161'

17 hrs - drlg.
6 hrs - trip
3/4 hr - rig service
1/4 hr - survey

1-20-81 Depth 6260' - T.I.H. to make 30' of rat hole & lay down drill pipe. Wt. 9.2 Vis 65 W.L. 10.0 1° 6260'
Ran Dual Inc. log and CNL, FDC logs by Welex.

4-3/4 hrs - drlg.
3 hrs - trip
1/4 hr - rig service
11-1/2 hrs - logging
3/4 hr - short trip
2-3/4 hr - circ. for logs
1 hr - cut drilling line

1-21-81 T.D. 6297' - Trip in hole and made 37' additional hole. Laid down drill pipe and collars; rigged up and ran 4½" csg. as follows:

1 -	4½" Bakerline guide shoe	.75'
1 -	jt. 4½" OD, 11.60#, K-55, 8 Rd, ST&C csg.	27.38'
1 -	Bakerline differential fill float collar	1.70'
62 -	jts 4½" OD, 11.6#, K-55, 8 Rd, ST&C csg.	1889.59'
1 -	4½" Bakerline cementing stage collar	1.70'
144 -	jts. 4½' OD, 11.6#, K-55, 8 Rd, ST&C csg.	4381.54'
	Total Equipment	6302.66'

Cemented first stage w/ 15 bbls pre flush and 30 bbls of C.W. 100 spacer followed by 225 sx class H self stress cement w/ 18% salt. Good circulation throughout job. Reciprocated csg. (Cont.)

1-21-81 (Cont.) Cemented second stage - pumped in 1332 sx of 65-35 w/ 6% gel, 10 lbs coalite w/ ¼# of D-29 per sx + .5% D60 then 200 sx class B 50/50 poz w/ 2% gel and 10% salt . Pumped plug down with 67 bbls of water. Closed tool. Total slurry 2942 cu. ft. Had good cement returns - Approx. 80 bbls. Set slips and cut off casing. Rig released at 7:00 a.m. 1-21-81.

2-5-81 Move in and rig up Bedford, Inc. rig #3. Move tbg. from Ohio #1E. Run tbg. and bit in hole to 4357'. Rig up pump truck.

2-6-81 Had to switch out pumps to drill. Drilled stage tool and 20' cement. Go in hole w/ tbg. Tag up at 6270'. Circulate hole clean. S.D.O.N.

2-7-81 Rig up Western Co. Pressure test csg. to 4000 psi. Held OK. Circulate hole w/ 2% KCL wtr w/ 2½# ammonium nitrate/1000 gal. Come out of hole. Laid down tbg. Rig up Welex. Ran CBL-CCL-GR from 6262' to 4950', 2800 to 2400'. Shut off camera-log 2400 to surface pipe. Gamma Ray. Excellent bonding across Dakota formation. Poor bonding 2800' to 2400'. Prep to perf and frac.

2-8-81 Rig up Welex. Perforate Dakota 6073, 75, 77, 82, 86, 89, 91; 6138, 40, 43, 44, 46, 49, 51, 57, 59, 61, 67 & 81 w/ 3-1/8" select fire guns w/ 120° phasing. Rig up Western Co. Breakdown formation w/ 2% KCL wtr. Initial breakdown 1800 psi. Acidize w/ 2500 gals 15% HCL. Max Press 3500 psi at 10 bbl/min. Dropped 30 RCN ball sealers. Ran 4½" junk basket and gauge ring to PBTD. Recovered 29 balls (17 hits, 12 no hits). Rig up Western Co. Frac as follows:

18,500 gals Mini Max III-40 + 600 SCF/bbl CO_2 - pad
10,000 gals Mini Max III-40 + 1½# 20-40 sand + 600 SCF/bbl CO_2
10,000 gals Mini Max III-40 + 2½# 20-40 sand + 600 SCF/bbl CO_2
12,000 gals Mini Max III-40 + 3½# 20-40 sand + 600 SCF/bbl CO_2
17,000 gals Mini Max III-40 + 4½# 20-40 sand + 600 SCF/bbl CO_2
15,895 gals Mini Max III-40 + 5½# 20-40 sand + 600 SCF/bbl CO_2
8,000 gals Mini Max III-40 + 5½# 10-20 sand + 600 SCF/bbl CO_2
4032 gal 2% KCL + 600 SCF/bbl CO_2 - flush

ISDP - 1500 psi 15 min.shut in 900 psi
Ave inj rate 30 BPM on fluid, 6 BPM on CO_2

Note - 20-40 sand at 5½#/gal was cut due to running short of fluid. 127 bbls short - 29,000# 20-40 sand (Cont.)

2-8-81 (Cont.)

Totals: 2½ gals I-15
50# B-5 breaker
44 gals X-cide
27 gals Aquaflow
44 gals Clay Master III
218# ammonium nitrate
15,400# KCL
800# calcium chloride
1850 gals diesel

Rig up Schlumberger to run GR-Temp after-frac logs. Logs indicate bottom 12 perfs covered w/ sand. Shut well in overnite.

2-9-81 Opened well to atmosphere at 9:00 a.m.2-8-81. Csg. pressure 640 psi. Checked well at 7:00 a.m. 2-9-81; gauged 800 MCFPD w/ pitot tube - w/ spray of wtr. and condensate.

2-10-81 Well flowing back. P.U. 2-3/8" tbg. Run in hole and tag up at 6234' RKB. All perforations open. POOH w/ 2-3/8 tbg. Did not finish trip. Shut well in over nite. SI pressure 1400 psi at 7:00 a.m. 2-10-81 after 13 hrs.

2-11-81 Finish trip out of hole w/ 2-3/8" tbg. Shut well in for build up. S.D.O.N.

2-12-81 Rig up B & R wireline service. Ran bottom hole pressure survey. Rig up Welex. Set Bridge plug at 2800'. Pour frac sand on top of bridge plug. Trip in hole w/ tbg. to 2715'. Reverse circulate hole w/ 2% KCL. Spot 100 gals 10% acetic acid across zone to be perforated. POOH w/ tbg. Rig up Welex. Perforate Chacra 2586, 87, 95, 96; 2659, 61, 63, 71, 73, 80, 82, 84.

2-13-81 Go in hole w/ tbg. and Baker retrievmatic packer. Set packer at 2465' Pressure up annulus to 1000 psi. Establish rate of 5½ bbl/min at 1600 psi. ISDP 650 psi. Flow back very small amount of fluid. Rig up swab. Well kicking each swab run. Swabbing dry. Making est. 150 MCF. Rig up Western Co. Acidize Chacra formation w/ 1000 gals 7½% HCL w/ 400 SCF/bbl N_2. Ball out with 4000 psi. Flush to bottom perf. w/ 2% KCL wtr. w/ 4000 SCF/bbl N_2. Ave treating press 3000 psi; max, 4000 psi. Rig up Welex. Ran gamma tracer survey. Open well up. Blew dead. Rig up to swab. Made 3 swab runs. Fluid - gas cut - didn't pull any fluid last run. Shut in overnite.

2-14-81 Tbg. press 680 psi. Blew down; did not unload. Swabbing from bottom. Recovering about 1 bbl per run for 3 runs; Fluid is gas cut. After 2 hrs swabbing, pulling less than ½ bbl/run. Making 1 run every 45 min. Recovering 5-10 gal per run. Unseated packer. P.O.O.H. w/ tbg. and packer. Shut in. Prep to foam frac. Well making estimated 100 MCFGPD.

2-15-81 Rig up Western Co. Foam frac Chacra perfs as follows:

3024 gal + 11,775 SCF N_2 + 75 quality foam - pad
3024 gal + ½# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
3024 gal + 1# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
3024 gal + 1½# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
3024 gal + 2# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
420 gal + 11,775 SCF N_2 + 75 quality foam - flush

Ave. treating pressure 2000 psi
Min. treating pressure 1950 psi
Max. treating pressure 2100 psi

Fluid injection rate 6.3 bbl/min.
ISDP 1500 psi 15 min shut in 1400 psi

Totals: 704,000 SCF N_2
170 gal Aqua flow
3000# KCL
160 gal Foamex
60,000# 10-20 sand

Opened well up thru 3/4" pos. chock after 2 hrs. shut in. Well gauged 705 MCFGPD after 19 hrs.

2-16-81 Shut down - Sunday

2-17-81 S.I. csg. pressure 915 psi. Ran BHP survey w/ B & R Wireline. W.O.O. - 4 hrs - open well up. Making 1 MMCF after 1½ hrs. Kill well; go in hole w/ tbg. Having trouble keeping well dead. Left open to pit. Prep to clean out to top of bridge plug at 2800'. Note B.H.P. 923 psi at 2748'.

2-18-81 Unable to reverse out sand; well taking fluid. Pulled out of hole. Start in hole w/ Baker Hydrostatic baler. Had trouble keeping well dead to pull out of hole. Unload and rack 1¼" tbg. Prep to clean out sand.

2-19-81 Cleaned out 40' w/ hydrostatic bailer - lost 10' (bailer plugged). P.O.O.H. Clean sand out of tbg. and rubber out of bailer. Go back in hole w/ Hydrostatic bailer. Cleaned out sand; latch on to and unseat bridge plug. Blew well to pit 1 hour and pull above Chacra perfs. Shut down. Left well open to pit over nite to blow down.

2-20-81 P.O.O.H. and lay down 2-3/8" tbg. and bridge plug. Rig up Welex. Set Baker model "F-1" production packer at 2766' RKB. Start trip in hole w/ 1¼" I.J. tbg. w/ seal assembly and blast joints and sliding sleeve. Shut down over night. Left well open to pit.

2-21-81 Finished running tubing as follows:

98 jts. 1¼" 2.3#, V-55, 10 Rd., I.J. tbg.	3179.68'
1 inner mandrel	2.90'
1 Baker seal assembly	2.90'
1 2-3/8" E.U.E. 8 Rd sub w/ coupling	2.10'
1 2-3/8" E.U.E. 8 Rd x 1¼ N.U. 10 Rd swedge	.25'
1 Baker Model "L" sliding sleeve	2.35'
2 jts. 1¼", 2.3#, V-55 10 Rd I.J. tbg.	64.94'
7 20' x 2.330 OD x 1.670 I.D. Bader blast jts.	140.00'
77 jts. 1¼" 2.3# V-55 10 Rd I.J. tbg.	2499.38'
4 6' 1¼" I.J. tbg. subs	23.60'
3 1' 1¼" I.J. tbg. subs	3.00'
1 jts. 1¼", 2.3# V-55, 10 Rd I.J. tbg.	30.81'
Total Equip.	5951.91'
Top tbg. head to RKB	7.09'
SET AT RKB	5959.00'

Pumped out plug. Shut well in. Released rig at 12:30 a.m. 2-20-81.

DATA SHEET

PREPARATION DATE: March 17, 1981

LEASE: Dustin

WELL NO: #1E

PPC WI% 100 NRI% 7935991

LOCATION: 1850' FSL, 1520' FEL
Sec 6, T29N-R12W

COUNTY: San Juan

STATE: New Mexico

OIL PURCHASER: Inland Corporation

PHONE:

GAS PURCHASER: Pioneer Natural Gas Company

PHONE: 806/378-3300

ALL MEASUREMENTS FROM KB

DATE Commenced Drilling: 1/12/81

DATE Released Rig: 1/21/81

DATE Completed (Ready to Produce) 3/10/81

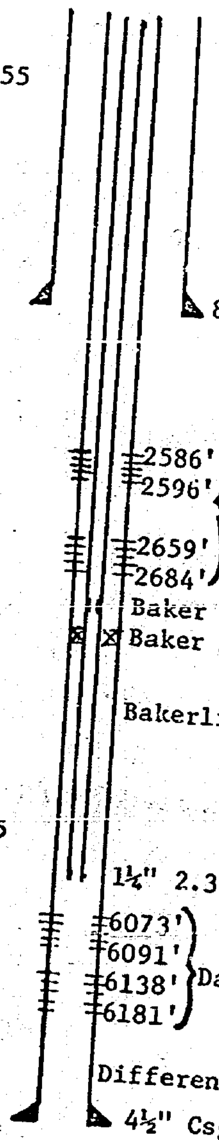
DATE OF FIRST PRODUCTION: WOP

PUMPER: Dugan Production Corporation

PHONE: 505/325-1821

Elevations: GL: 5484' DF: 5495' KB: 5496'

Surface Casing
8 5/8 "
411.6 ', 24 #K-55
', #,
', #,
Set at 423'
W/ 275 sxs CMT
Hole Size 12¼ "
CMT Top Surface
By Circulated



INITIAL COMPLETION: 2/7/81 to 3/10/81

(SEE REVERSE)

Production Casing
4½ "
[illegible] ', 11.6 #, K-55
', #,
', #,
', #,
', #,
6297 '
sxs CMT
7 7/8 "
Surface '
Circulated

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 5

WELL NAME: Dustin #1E
TOTAL DEPTH: 6297'
PLUG BACK TD: 6270'

Reservoir Data - Dustin #1E

Basin Dakota - Farmington Chacra (Proposed Name)

San Juan County, New Mexico

Zone	Net Pay Thickness	Average Porosity	Average Connate Water	Initial Bottomhole Pressure	Reservoir Temperature	Reservoir Gas Gravity
Chacra	24 FT	13.5%	52.7%	921 psia	112°F	0.65
Dakota	41 FT	9.5%	32.2%	1342 psia	172°F	0.65

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San Juan County, New Mexico
Case No. 7214
Exhibit No. 6

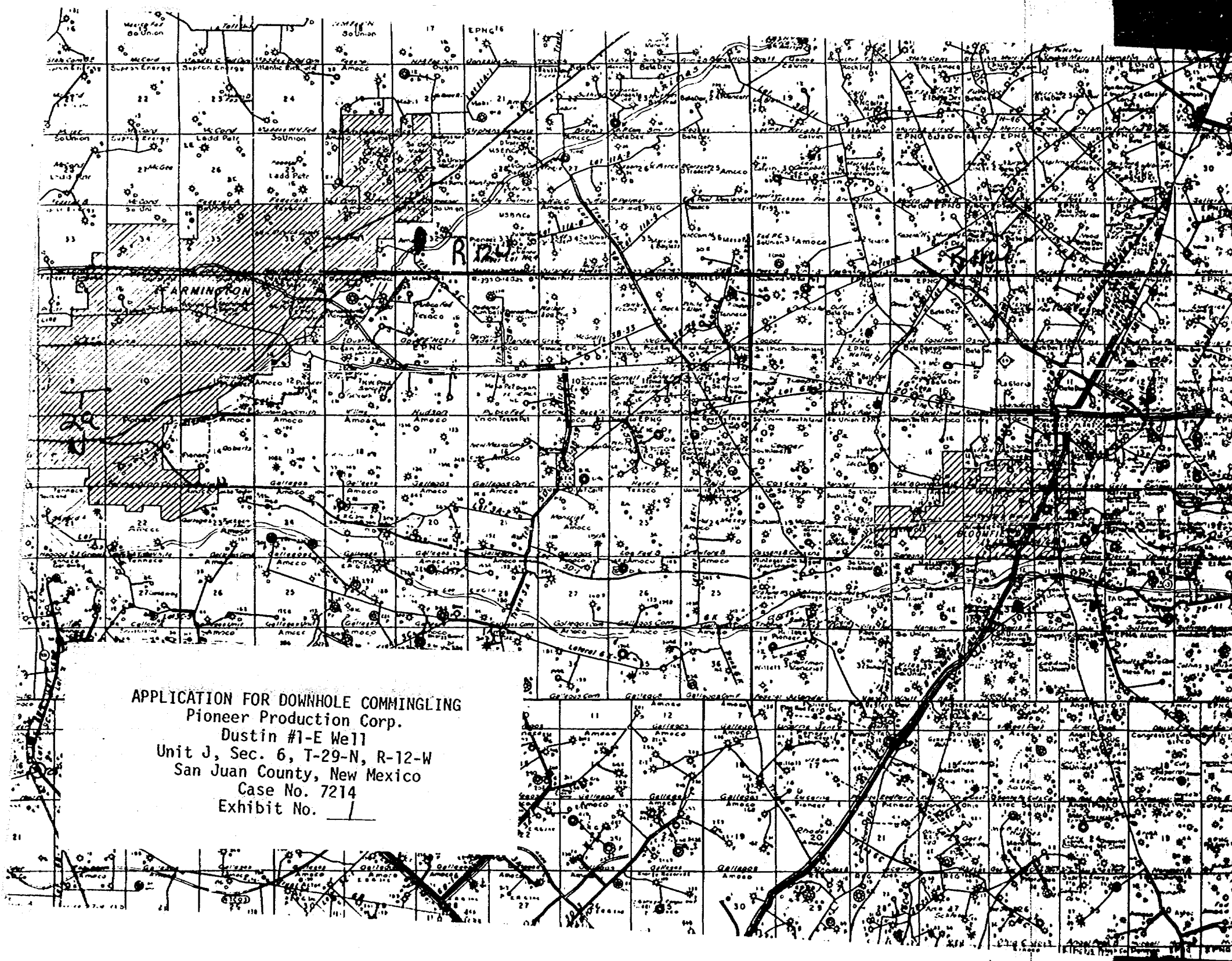
Proposed Allocation of Production
From Pioneer Production Corporation - Dustin No. 1E
To the Dakota and the Chacra Formations

	Dakota		Chacra	
	MCFPD	% of Total	MCFPD	% of Total
Well Test	696	59	485	41
CAOF	702	59	495	41

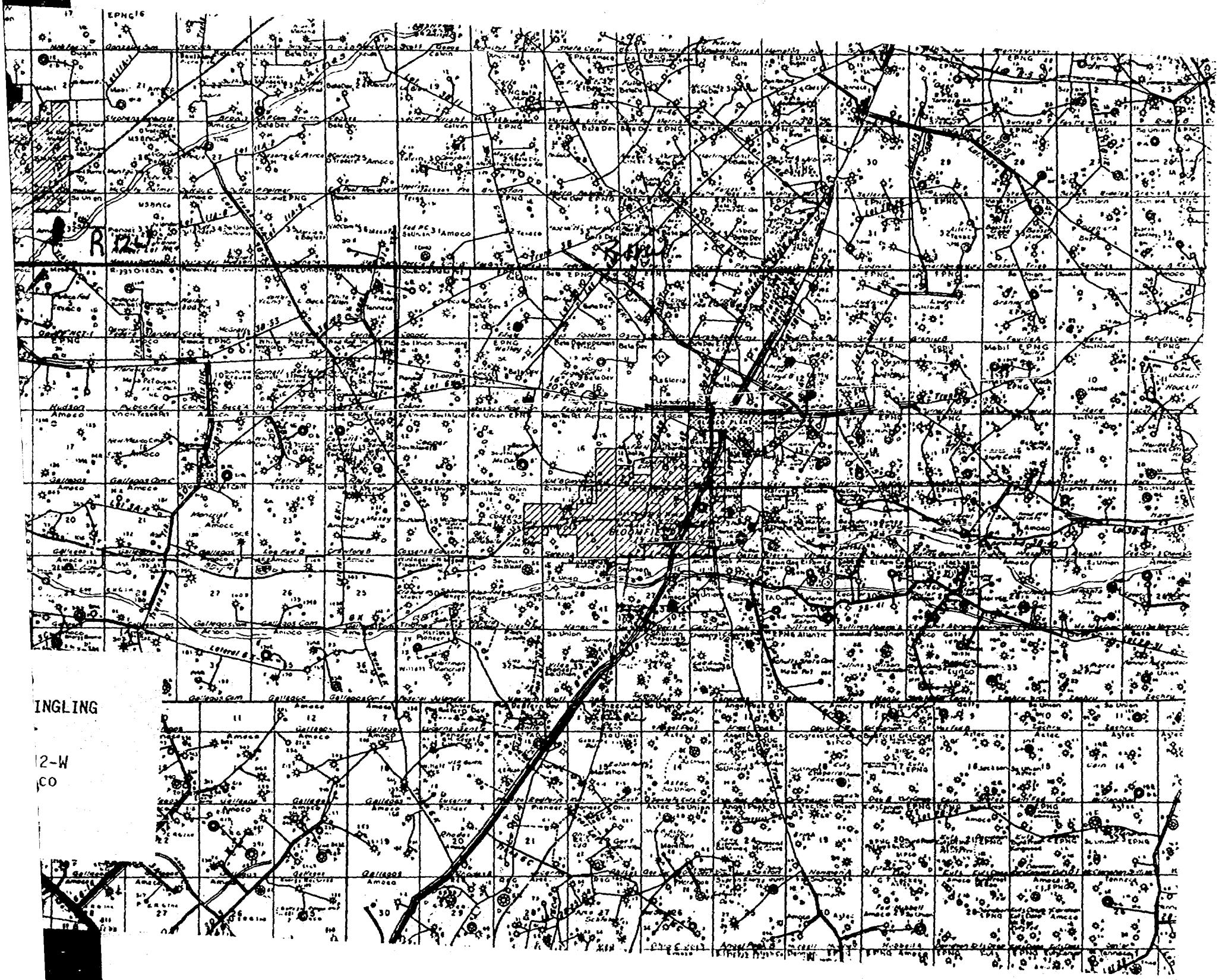
Recommend division of the commingled gas stream at the rate of 59% to the Dakota and 41% to the Chacra Formations.

Condensate production is considered insignificant from the Chacra Formation and all condensate production from the commingled stream should be assigned to the Dakota Formation.

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 7

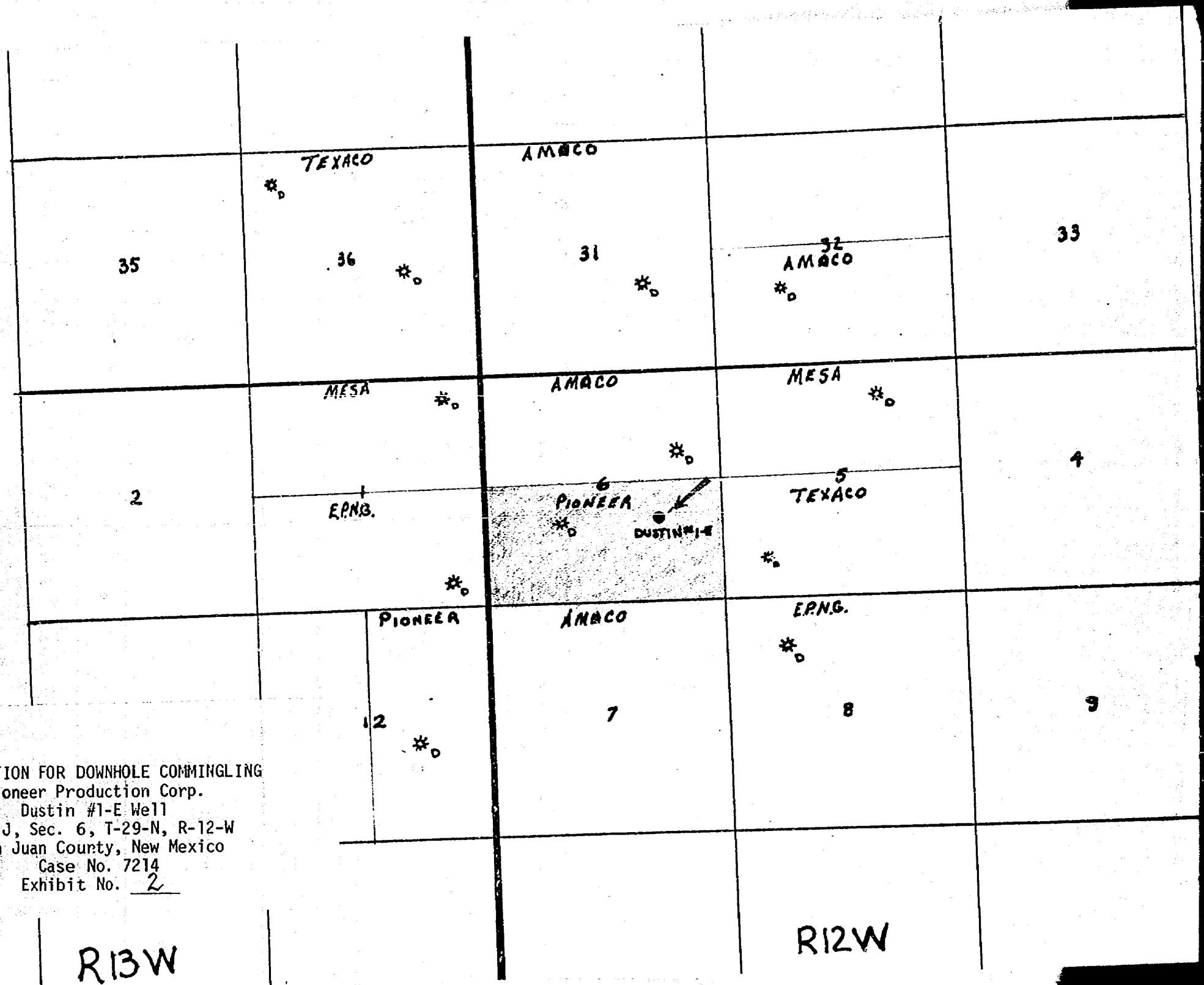


APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 1



INGLING

12-W
CO



APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 2

TEXACO

36

AMOCO

31

32

AMOCO

33

T 30 N

MESA

AMOCO

MESA

1

E.P.N.G.

6

PIONEER

DUSTIN #1-E

5

TEXACO

4

T 29 N

PIONEER

12

AMOCO

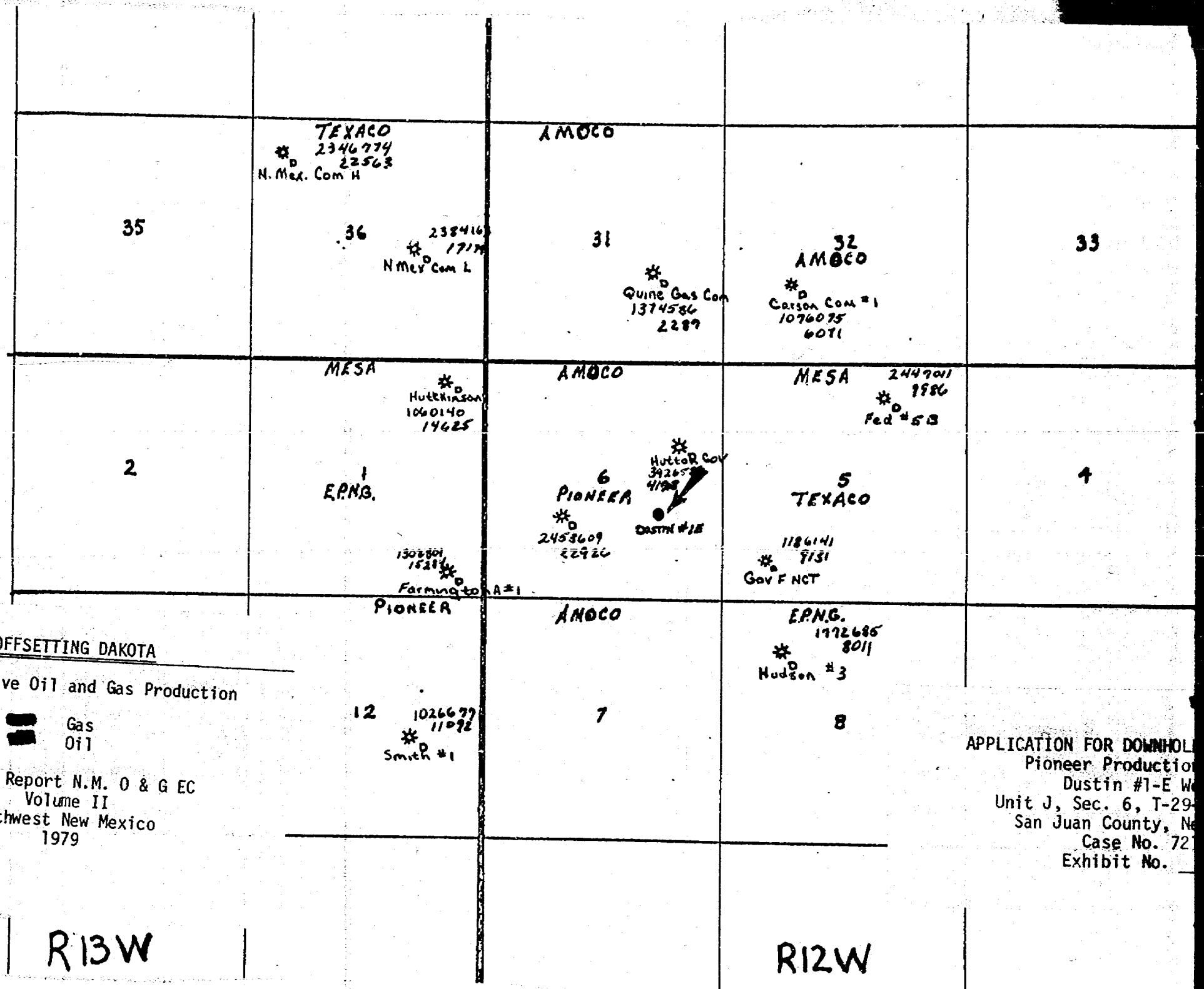
7

E.P.N.G.

8

9

R12W



OFFSETTING DAKOTA

Accumulative Oil and Gas Production

Gas
Oil

Annual Report N.M. O & G EC
Volume II
Northwest New Mexico
1979

R13W

R12W

APPLICATION FOR DOWNHOL
Pioneer Productio
Dustin #1-E W
Unit J, Sec. 6, T-29
San Juan County, N
Case No. 72
Exhibit No.

TEXACO 2346774 22563 N. Mex. Com H 36 2384161 1717 N Mex Com L	AMOCO 31 Quine Gas Com 1374586 2289	32 AMOCO Carson Com #1 1076075 6071	33	T 30 N
MESA Hutchinson 1060140 14625 1 E.P.N.G. 1302801 15284 Farmington A #1	AMOCO 6 PIONEER 2453609 22926 Hutton Gov 3922 4198 Dustin #1E	MESA 2449041 9586 Fed #5 5 TEXACO 1186141 9131 Gov F NCT	4	T. 29 N
PIONEER 12 1026677 11092 Smith #1	AMOCO 7	E.P.N.G. 1772685 8011 Hudson #3 8		

R12W

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 3

dugan production corp.

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 4

PIONEER PRODUCTION CORP.
Dustin #1E
1850' FSL - 1520' FEL
Sec 6 T29N R12W
San Juan County, NM

MORNING REPORT

1-13-81 Moved in and rigged up Four Corners Rig #10. Spudded at 3:30 p.m. 1-12-81. Drilled 12¼" hole to 436'. Ran 10 jts. 8-5/8" OD, 24#, K-55 8 Rd ST&C csg. T.E. 411.60' set at 423' RKB. Now cementing csg. 1¼° at 436'

6 hrs - drlg.
3-1/2 hrs - drill rat & mouse holes
10-1/2 hrs - drlg.
3/4 hr - repairs
1/4 hr - survey
1 hr - trip
1-1/2 hrs - run 8-5/8" csg.

1-14-81 1430' - Drlg. w/ wtr. & Benix 1° at 934'; 1° at 1306'
Cemented 8-5/8" surface csg. w/ 275 sx class "B" plus 2% CaCl. POB at 6:30 a.m. 1-13-81. Cement circulated approx. 2 bbls.

8-1/2 hrs - drlg.
2-1/4 hrs - trip
1/4 hr - survey
1/2 hr - cement surface csg.
12-1/4 hrs - WOC
1/4 hr - wash to btm.

1-15-81 3048' - Drlg. w/ wtr. & Benix. 3/4° at 2405'; 3/4° at 2723'

22-1/4 hrs - drlg.
3/4 hr - rig service
1 hr - survey

1-16-81 4144' - Drlg. w/ wtr. & Benix 3/4° at 3423'; 3/4° at 3754'

19 hrs - drlg.
3-1/2 hrs - trip
3/4 hr - rig service
1/2 hr - survey
1/4 hr - wash to btm.

P. O. BOX 208 • FARMINGTON, NEW MEXICO 87401 • PHONE: 505-325-1821

1-17-81 5071' - Drlg. Wt. 8.9 Vis 35 3/4° at 4974'

22-3/4 hrs - drlg.
3/4 hr - rig service
1/2 hr - survey

(Lost 75 bbls mud at 5025')

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23 hrs - drlg.
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1° at 6161'

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4-3/4 hrs - drlg.
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Reciprocated csg.

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27 gals Aquaflow
44 gals Clay Master III
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2-11-81 Finish trip out of hole w/ 2-3/8" tbg. Shut well in for build up. S.D.O.N.

2-12-81 Rig up B & R wireline service. Ran bottom hole pressure survey. Rig up Welex. Set Bridge plug at 2800'. Pour frac sand on top of bridge plug. Trip in hole w/ tbg. to 2715'. Reverse circulate hole w/ 2% KCL. Spot 100 gals 10% acetic acid across zone to be perforated. POOH w/ tbg. Rig up Welex. Perforate Chacra 2586, 87, 95, 96; 2659, 61, 63, 71, 73, 80, 82, 84.

2-13-81 Go in hole w/ tbg. and Baker retrievmatic packer. Set packer at 2465' Pressure up annulus to 1000 psi. Establish rate of 5½ bbl/min at 1600 psi. ISDP 650 psi. Flow back very small amount of fluid. Rig up swab. Well kicking each swab run. Swabbing dry. Making est. 150 MCF. Rig up Western Co. Acidize Chacra formation w/ 1000 gals 7½% HCL w/ 400 SCF/bbl N_2. Ball out with 4000 psi. Flush to bottom perf. w/ 2% KCL wtr. w/ 4000 SCF/bbl N_2. Ave treating press 3000 psi; max, 4000 psi. Rig up Welex. Ran gamma tracer survey. Open well up. Blew dead. Rig up to swab. Made 3 swab runs. Fluid - gas cut - didn't pull any fluid last run. Shut in overnite.

2-14-81 Tbg. press 680 psi. Blew down; did not unload. Swabbing from bottom. Recovering about 1 bbl per run for 3 runs; Fluid is gas cut. After 2 hrs swabbing, pulling less than ½ bbl/run. Making 1 run every 45 min. Recovering 5-10 gal per run. Unseated packer. P.O.O.H. w/ tbg. and packer. Shut in. Prep to foam frac. Well making estimated 100 MCFGPD.

2-15-81 Rig up Western Co. Foam frac Chacra perfs as follows:

3024 gal + 11,775 SCF N_2 + 75 quality foam - pad
3024 gal + ½# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
3024 gal + 1# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
3024 gal + 1½# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
3024 gal + 2# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
420 gal + 11,775 SCF N_2 + 75 quality foam - flush

Ave. treating pressure 2000 psi
Min. treating pressure 1950 psi
Max. treating pressure 2100 psi

Fluid injection rate 6.3 bbl/min.
ISDP 1500 psi 15 min shut in 1400 psi

Totals: 704,000 SCF N_2
170 gal Aqua flow
3000# KCL
160 gal Foamex
60,000# 10-20 sand

Opened well up thru 3/4" pos. chock after 2 hrs. shut in. Well gauged 705 MCFGPD after 19 hrs.

2-16-81 Shut down - Sunday

2-17-81 S.I. csg. pressure 915 psi. Ran BHP survey w/ B & R Wireline. W.O.O. - 4 hrs - open well up. Making 1 MMCF after 1½ hrs. Kill well; go in hole w/ tbg. Having trouble keeping well dead. Left open to pit. Prep to clean out to top of bridge plug at 2800'. Note B.H.P. 923 psi at 2748'.

2-18-81 Unable to reverse out sand; well taking fluid. Pulled out of hole. Start in hole w/ Baker Hydrostatic baler. Had trouble keeping well dead to pull out of hole. Unload and rack 1¼" tbg. Prep to clean out sand.

2-19-81 Cleaned out 40' w/ hydrostatic bailer - lost 10' (bailer plugged). P.O.O.H. Clean sand out of tbg. and rubber out of bailer. Go back in hole w/ Hydrostatic bailer. Cleaned out sand; latch on to and unseat bridge plug. Blew well to pit 1 hour and pull above Chacra perfs. Shut down. Left well open to pit over nite to blow down.

2-20-81 P.O.O.H. and lay down 2-3/8" tbg. and bridge plug. Rig up Welex. Set Baker model "F-1" production packer at 2766' RKB. Start trip in hole w/ 1¼" I.J. tbg. w/ seal assembly and blast joints and sliding sleeve. Shut down over night. Left well open to pit.

2-21-81 Finished running tubing as follows:

98 jts. 1¼" 2.3#, V-55, 10 Rd., I.J. tbg.	3179.68'
1 inner mandrel	2.90'
1 Baker seal assembly	2.90'
1 2-3/8" E.U.E. 8 Rd sub w/ coupling	2.10'
1 2-3/8" E.U.E. 8 Rd x 1¼ N.U. 10 Rd swedge	.25'
1 Baker Model "L" sliding sleeve	2.35'
2 jts. 1¼", 2.3#, V-55 10 Rd I.J. tbg.	64.94'
7 20' x 2.330 OD x 1.670 I.D. Bader blast jts.	140.00'
77 jts. 1¼" 2.3# V-55 10 Rd I.J. tbg.	2499.38'
4 6' 1¼" I.J. tbg. subs	23.60'
3 1' 1¼" I.J. tbg. subs	3.00'
1 jts. 1¼", 2.3# V-55, 10 Rd I.J. tbg.	30.81'
Total Equip.	5951.91'
Top tbg. head to RKB	7.09'
SET AT RKB	5959.00'

Pumped out plug. Shut well in. Released rig at 12:30 a.m. 2-20-81.

DATA SHEET

PREPARATION DATE: March 17, 1981

LEASE: Dustin

WELL NO: #1E

LOCATION: 1850' FSL, 1520' FEL

Sec 6, T29N-R12W

PPC WI% 100 NRI% 7935991

COUNTY: San Juan

STATE: New Mexico

OIL PURCHASER: Inland Corporation

PHONE:

GAS PURCHASER: Pioneer Natural Gas Company

PHONE: 806/378-3300

ALL MEASUREMENTS FROM KB

DATE Commenced Drilling: 1/12/81

DATE Released Rig: 1/21/81

DATE Completed (Ready to Produce) 3/10/81

DATE OF FIRST PRODUCTION: WOP

PUMPER: Dugan Production Corporation

PHONE: 505/325-1821

Elevations: GL: 5484' DF: 5495' KB: 5496'

Surface Casing
8 5/8 "
411.6 ' 24 #K-55
_____ ' _____ #,
_____ ' _____ #,
Set at 423'
W/ 275 sxs CMT
Hole Size 12¼ "
CMT Top Surface
By Circulated

8 5/8" Csg @ 423'

INITIAL COMPLETION: 2/7/81 to 3/10/81

(SEE REVERSE)

2586'
2596'
} Chacra Perforations
2659'
2684'

Baker Model L Sliding Sleeve set @ 2763'

Baker Model F-1 Production Pkr set @ 2766'

Bakerline Stage Collar @ 4378'

1¼" 2.3#V-55 IJ 10 Rd Tbg set @ 5959'

6073'
6091'
6138'
} Dakota Perforations
6181'

Differential fill float collar @ 6269'

4½" Csg @ 6297'

Production Casing
4½ "
6303 ' 11.6 #, K-55
_____ ' _____ #,
_____ ' _____ #,
_____ ' _____ #,
_____ ' _____ #,
Set at 6297 '
W/ 1757 sxs CMT
Hole Size 7 7/8 "
CMT Top Surface '
By Circulated

PERFORATION RECORD

Chacra
2586-87-95-96
2659-61-63-71
73-80-82-84

Dakota
Upper: 6073-75-77-82-86-89-91

Main: 6138-40-42-44-46-49-51-57-59-67-81

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 5

WELL NAME: Dustin #1E
TOTAL DEPTH: 6297'
PLUG BACK TD: 6270'

Reservoir Data - Dustin #1E

Basin Dakota - Farmington Chacra (Proposed Name)

San Juan County, New Mexico

Zone	Net Pay Thickness	Average Porosity	Average Connate Water	Initial Bottomhole Pressure	Reservoir Temperature	Reservoir Gas Gravity
Chacra	24 FT	13.5%	52.7%	921 psia	112°F	0.65
Dakota	41 FT	9.5%	32.2%	1342 psia	172°F	0.65

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 6

Proposed Allocation of Production
From Pioneer Production Corporation - Dustin No. 1E
To the Dakota and the Chacra Formations

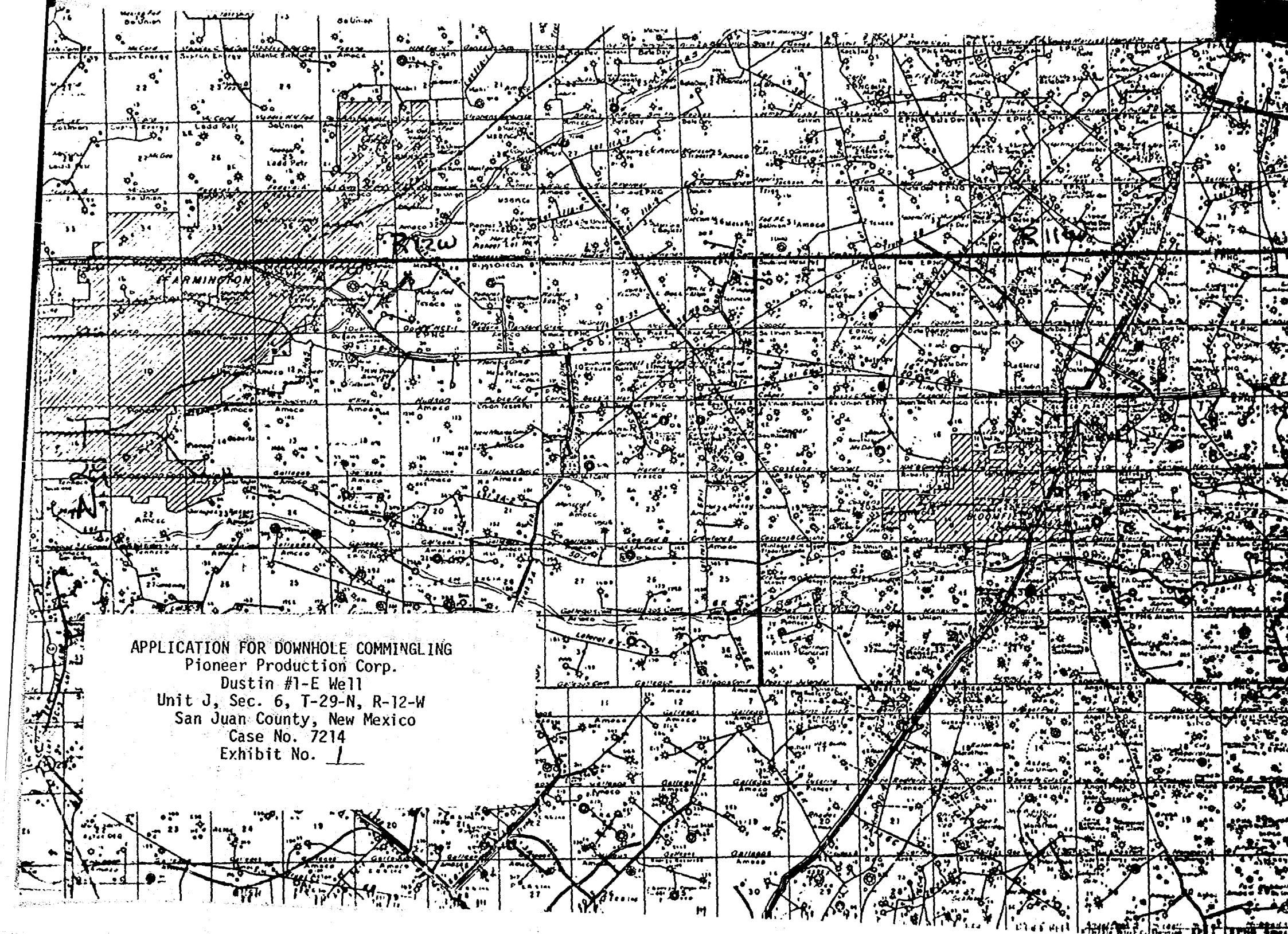
	Dakota		Chacra	
	MCFPD	% of Total	MCFPD	% of Total
Well Test	696	59	485	41
CAOF	702	59	495	41

Recommend division of the commingled gas stream at the rate of 59% to the Dakota and 41% to the Chacra Formations.

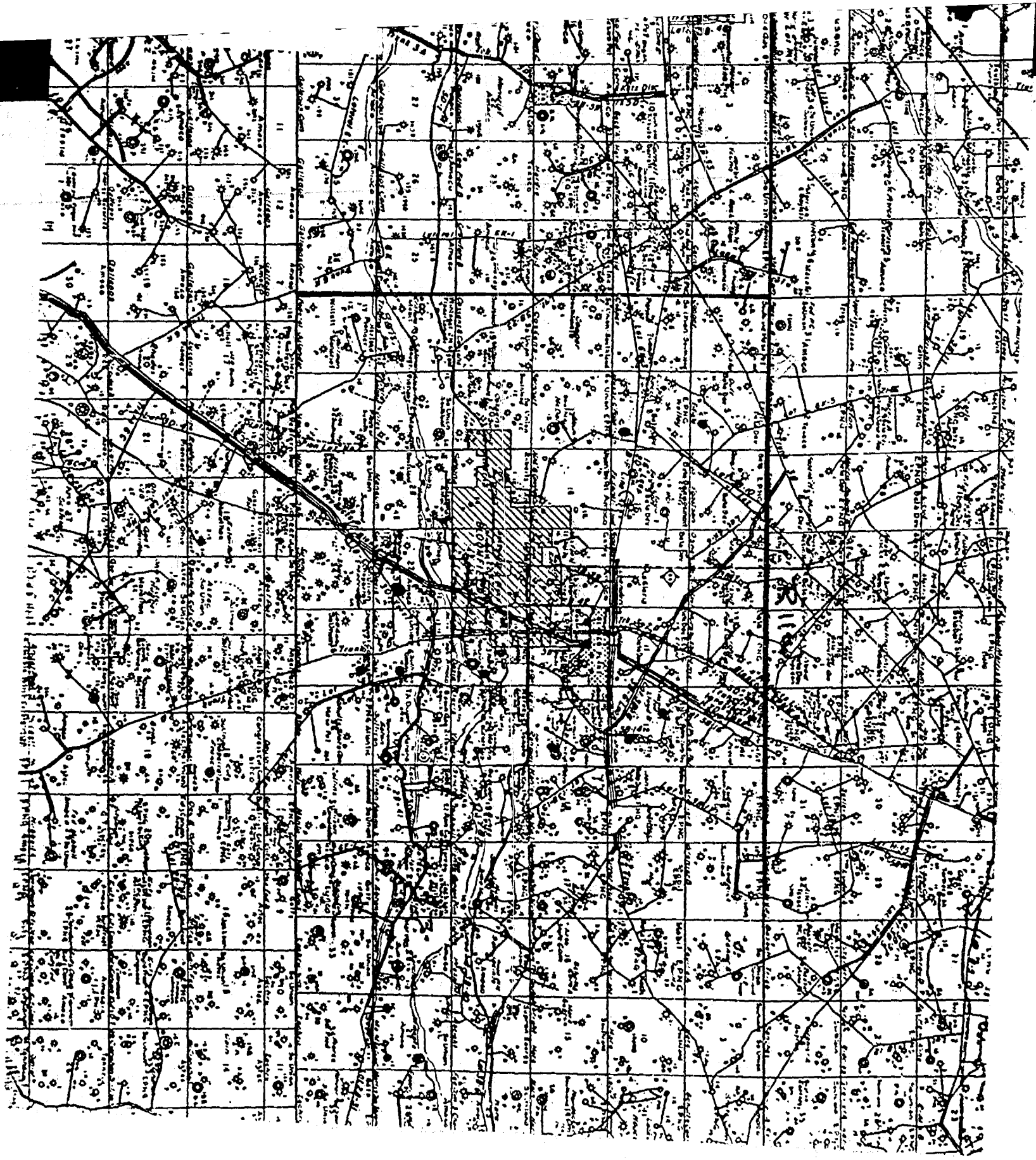
Condensate production is considered insignificant from the Chacra Formation and all condensate production from the commingled stream should be assigned to the Dakota Formation.

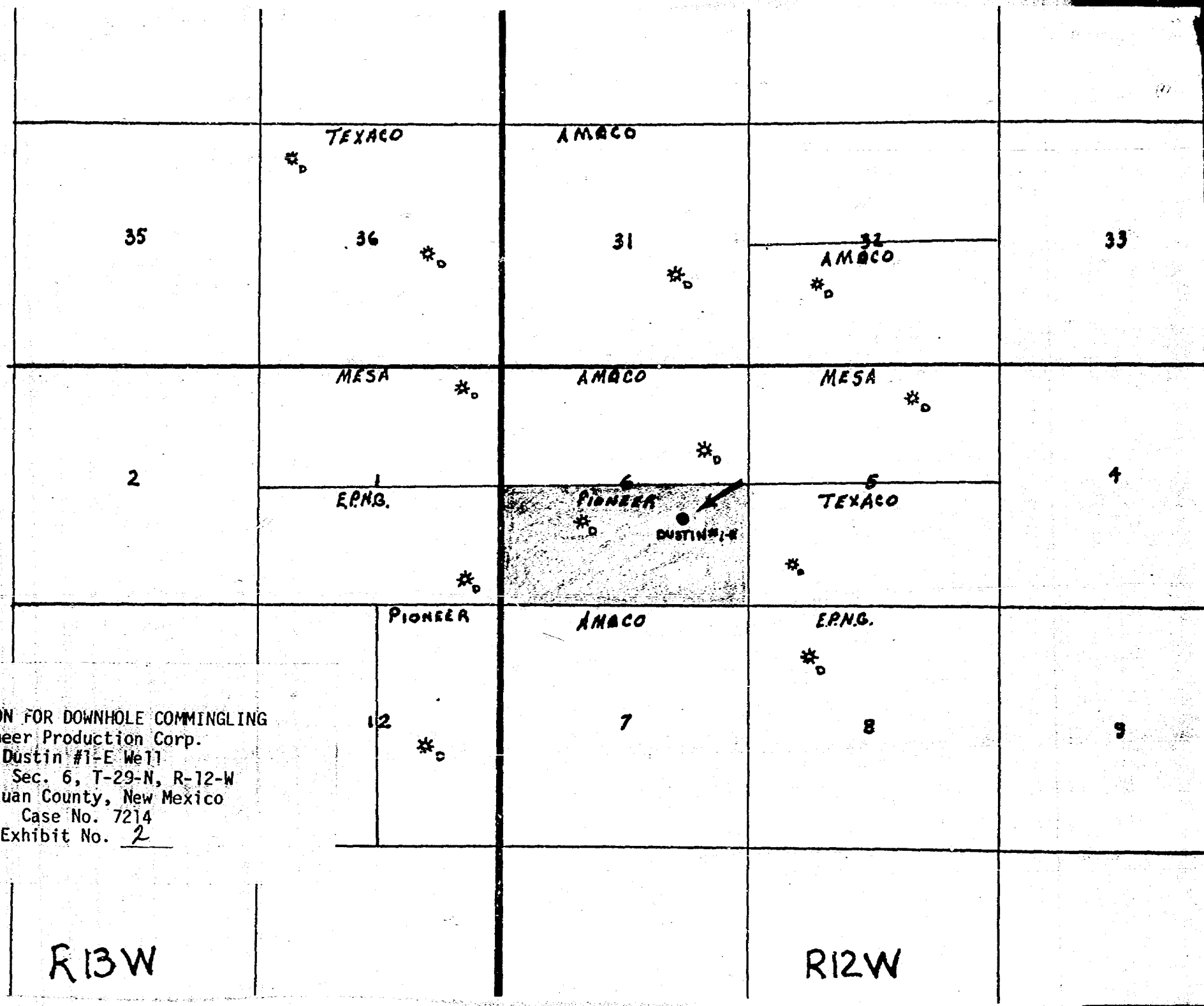
100% cond to OK

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 7



APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 1





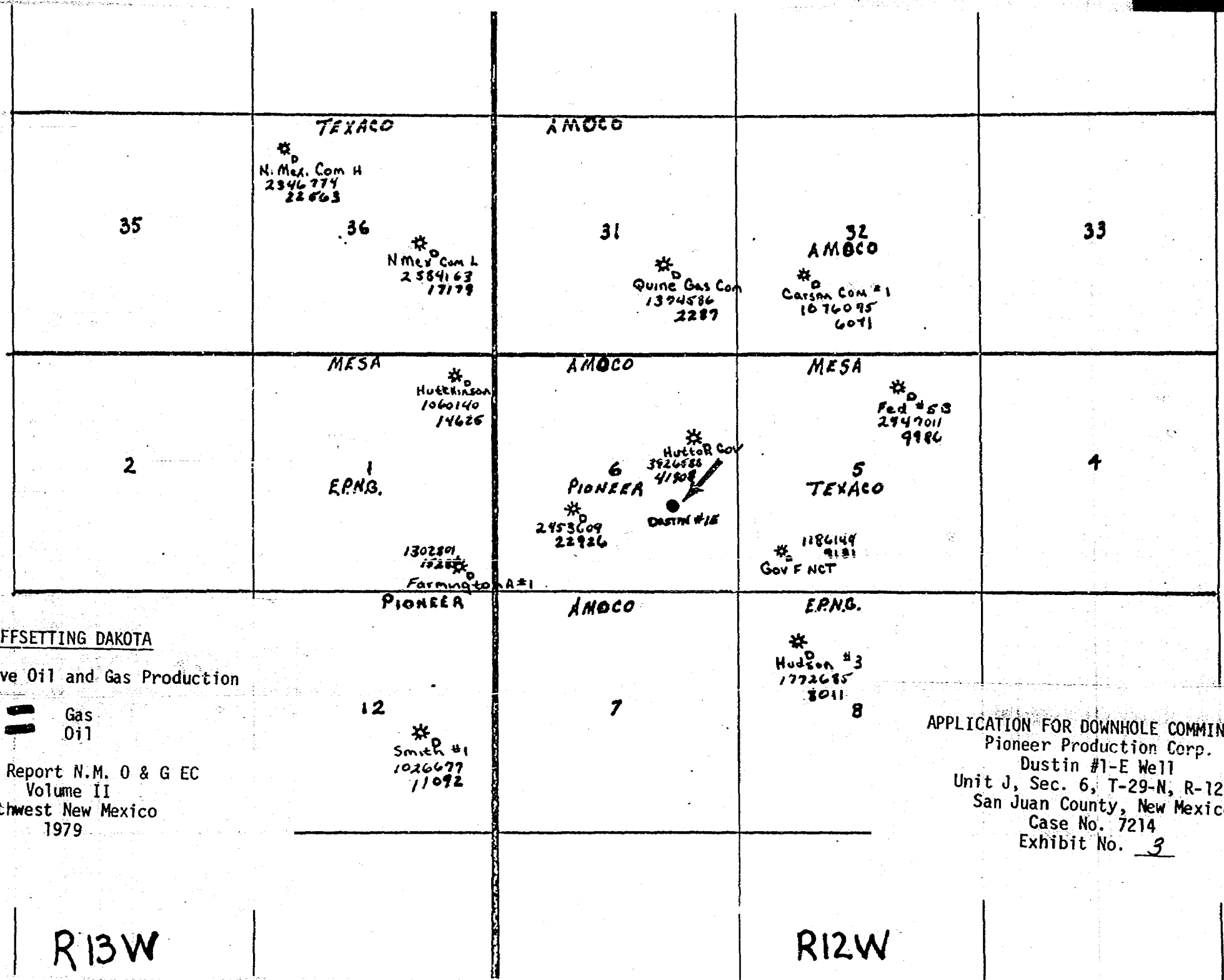
APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 2

E COMMINGLING
n Corp.
11
-N, R-12-W
ew Mexico
14
2

N

	TEXACO	AMOCO			
5	36	31	32 AMOCO	33	T 30 N
	MESA	AMOCO	MESA		
	1 E.P.N.G.	6 PIONEER DUSTIN #1-E	5 TEXACO	4	T 29 N
	PIONEER	AMOCO	E.P.N.G.		
	12	7	8	9	

R12W



OFFSETTING DAKOTA

Accumulative Oil and Gas Production

Gas
Oil

Annual Report N.M. O & G EC
Volume II
Northwest New Mexico
1979

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 3

TEXACO
N. Mex. Com H
2346274
22863

36

N Mex Com L
2584163
17179

AMOCO

31

Quine Gas Com
1374586
2287

32
AMOCO
Carson Com #1
1076075
6071

33

T 30 N

MESA
Hutchinson
1060140
14625

1
E.P.N.G.

AMOCO

6
PIONEER
Hutton Gov
3926588
41908
DUSTIN #1E
2453609
22926

MESA
Fed #5 B
2947011
9986

5
TEXACO
1186149
9191
Gov F NCT

4

T. 29 N

1302801
15285
Farmington A #1
PIONEER

AMOCO

E.P.N.G.
Hudson #3
1772685
8011

12

Smith #1
1026677
11092

7

8

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 3

R12W

dugan production corp.

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 4

PIONEER PRODUCTION CORP.
Dustin #1E
1850' FSL - 1520' FEL
Sec 6 T29N R12W
San Juan County, NM

MORNING REPORT

1-13-81 Moved in and rigged up Four Corners Rig #10. Spudded at 3:30 p.m. 1-12-81. Drilled 12¼" hole to 436'. Ran 10 jts. 8-5/8" OD, 24#, K-55 8 Rd ST&C csg. T.E. 411.60' set at 423' RKB. Now cementing csg. 1¼° at 436'

6 hrs - drlg.
3-1/2 hrs - drill rat & mouse holes
10-1/2 hrs - drlg.
3/4 hr - repairs
1/4 hr - survey
1 hr - trip
1-1/2 hrs - run 8-5/8" csg.

1-14-81 1430' - Drlg. w/ wtr. & Benix 1° at 934'; 1° at 1306'
Cemented 8-5/8" surface csg. w/ 275 sx class "B" plus 2% CaCl. POB at 6:30 a.m. 1-13-81. Cement circulated approx. 2 bbls.

8-1/2 hrs - drlg.
2-1/4 hrs - trip
1/4 hr - survey
1/2 hr - cement surface csg.
12-1/4 hrs - WOC
1/4 hr - wash to btm.

1-15-81 3048' - Drlg. w/ wtr. & Benix. 3/4° at 2405'; 3/4° at 2723'

22-1/4 hrs - drlg.
3/4 hr - rig service
1 hr - survey

1-16-81 4144' - Drlg. w/ wtr. & Benix 3/4° at 3423'; 3/4° at 3754'

19 hrs - drlg.
3-1/2 hrs - trip
3/4 hr - rig service 1/4 hr - wash to btm.
1/2 hr - survey

1-17-81 5071' - Drlg. Wt. 8.9 Vis 35 3/4° at 4974'

22-3/4 hrs - drlg.
3/4 hr - rig service
1/2 hr - survey

(Lost 75 bbls mud at 5025')

1-18-81 5800' - Drlg. Wt. 9.0 Vis 35 W.L. 10.2 3/4° at 5476'

23 hrs - drlg.
3/4 hr - rig service
1/4 hr - survey

1-19-81 6174' - Drlg. Wt. 9.1 Vis 70 W.L. 10.2 1° at 5980'
1° at 6161'

17 hrs - drlg.
6 hrs - trip
3/4 hr - rig service
1/4 hr - survey

1-20-81 Depth 6260' - T.I.H. to make 30' of rat hole & lay down drill pipe. Wt. 9.2 Vis 65 W.L. 10.0 1° 6260'
Ran Dual Inc. log and CNL, FDC logs by Welex.

4-3/4 hrs - drlg.
3 hrs - trip
1/4 hr - rig service
11-1/2 hrs - logging
3/4 hr - short trip
2-3/4 hr - circ. for logs
1 hr - cut drilling line

1-21-81 T.D. 6297' - Trip in hole and made 37' additional hole. Laid down drill pipe and collars; rigged up and ran 4½" csg. as follows:

1 -	4½" Bakerline guide shoe	.75'
1 -	jt. 4½" OD, 11.60#, K-55, 8 Rd, ST&C csg.	27.38'
1 -	Bakerline differential fill float collar	1.70'
1 -	jts 4½" OD, 11.6#, K-55, 8 Rd, ST&C csg.	1889.59'
62 -	4½" Bakerline cementing stage collar	1.70'
1 -	jts. 4½' OD, 11.6#, K-55, 8 Rd, ST&C csg.	4381.54'
144 -	Total Equipment	6302.66'

Cemented first stage w/ 15 bbls pre flush and 30 bbls of C.W. 100 spacer followed by 225 sx class H self stress cement w/ 18% salt. Good circulation throughout job. (Cont.)
Reciprocated csg.

1-21-81 (Cont.) Cemented second stage - pumped in 1332 sx of 65-35 w/ 6% gel, 10 lbs coalite w/ ¼# of D-29 per sx + .5% D60 then 200 sx class B 50/50 poz w/ 2% gel and 10% salt . Pumped plug down with 67 bbls of water. Closed tool. Total slurry 2942 cu. ft. Had good cement returns - Approx. 80 bbls. Set slips and cut off casing. Rig released at 7:00 a.m. 1-21-81.

2-5-81 Move in and rig up Bedford, Inc. rig #3. Move tbg. from Ohio #1E. Run tbg. and bit in hole to 4357'. Rig up pump truck.

2-6-81 Had to switch out pumps to drill. Drilled stage tool and 20' cement. Go in hole w/ tbg. Tag up at 6270'. Circulate hole clean. S.D.O.N.

2-7-81 Rig up Western Co. Pressure test csg. to 4000 psi. Held OK. Circulate hole w/ 2% KCL wtr w/ 2½# ammonium nitrate/1000 gal. Come out of hole. Laid down tbg. Rig up Welex. Ran CBL-CCL-GR from 6262' to 4950', 2800 to 2400'. Shut off camera-log 2400 to surface pipe. Gamma Ray. Excellent bonding across Dakota formation. Poor bonding 2800' to 2400'. Prep to perf and frac.

2-8-81 Rig up Welex. Perforate Dakota 6073, 75, 77, 82, 86, 89, 91; 6138, 40, 43, 44, 46, 49, 51, 57, 59, 61, 67 & 81 w/ 3-1/8" select fire guns w/ 120° phasing. Rig up Western Co. Breakdown formation w/ 2% KCL wtr. Initial breakdown 1800 psi. Acidize w/ 2500 gals 15% HCL. Max Press 3500 psi at 10 bbl/min. Dropped 30 RCN ball sealers. Ran 4½" junk basket and gauge ring to PBTD. Recovered 29 balls (17 hits, 12 no hits). Rig up Western Co. Frac as follows:

18,500 gals Mini Max III-40 + 600 SCF/bbl CO_2 - pad
10,000 gals Mini Max III-40 + 1½# 20-40 sand + 600 SCF/bbl CO_2
10,000 gals Mini Max III-40 + 2½# 20-40 sand + 600 SCF/bbl CO_2
12,000 gals Mini Max III-40 + 3½# 20-40 sand + 600 SCF/bbl CO_2
17,000 gals Mini Max III-40 + 4½# 20-40 sand + 600 SCF/bbl CO_2
15,895 gals Mini Max III-40 + 5½# 20-40 sand + 600 SCF/bbl CO_2
8,000 gals Mini Max III-40 + 5½# 10-20 sand + 600 SCF/bbl CO_2
4032 gal 2% KCL + 600 SCF/bbl CO_2 - flush

ISDP - 1500 psi 15 min.shut in 900 psi
Ave inj rate 30 BPM on fluid, 6 BPM on CO_2

Note - 20-40 sand at 5½#/gal was cut due to running short of fluid. 127 bbls short - 29,000# 20-40 sand (Cont.)

2-8-81 (Cont.)

Totals:
- 2½ gals I-15
- 50# B-5 breaker
- 44 gals X-cide
- 27 gals Aquaflow
- 44 gals Clay Master III
- 218# ammonium nitrate
- 15,400# KCL
- 800# calcium chloride
- 1850 gals diesel

Rig up Schlumberger to run GR-Temp after-frac logs. Logs indicate bottom 12 perfs covered w/ sand. Shut well in overnite.

2-9-81 Opened well to atmosphere at 9:00 a.m.2-8-81. Csg. pressure 640 psi. Checked well at 7:00 a.m. 2-9-81; gauged 800 MCFPD w/ pitot tube - w/ spray of wtr. and condensate.

2-10-81 Well flowing back. P.U. 2-3/8" tbg. Run in hole and tag up at 6234' RKB. All perforations open. POOH w/ 2-3/8 tbg. Did not finish trip. Shut well in over nite. SI pressure 1400 psi at 7:00 a.m. 2-10-81 after 13 hrs.

2-11-81 Finish trip out of hole w/ 2-3/8" tbg. Shut well in for build up. S.D.O.N.

2-12-81 Rig up B & R wireline service. Ran bottom hole pressure survey. Rig up Welex. Set Bridge plug at 2800'. Pour frac sand on top of bridge plug. Trip in hole w/ tbg. to 2715'. Reverse circulate hole w/ 2% KCL. Spot 100 gals 10% acetic acid across zone to be perforated. POOH w/ tbg. Rig up Welex. Perforate Chacra 2586, 87, 95, 96; 2659, 61, 63, 71, 73, 80, 82, 84.

2-13-81 Go in hole w/ tbg. and Baker retrievmatic packer. Set packer at 2465' Pressure up annulus to 1000 psi. Establish rate of 5½ bbl/min at 1600 psi. ISDP 650 psi. Flow back very small amount of fluid. Rig up swab. Well kicking each swab run. Swabbing dry. Making est. 150 MCF. Rig up Western Co. Acidize Chacra formation w/ 1000 gals 7½% HCL w/ 400 SCF/bbl N_2. Ball out with 4000 psi. Flush to bottom perf. w/ 2% KCL wtr. w/ 4000 SCF/bbl N_2. Ave treating press 3000 psi; max, 4000 psi. Rig up Welex. Ran gamma tracer survey. Open well up. Blew dead. Rig up to swab. Made 3 swab runs. Fluid - gas cut - didn't pull any fluid last run. Shut in overnite.

2-14-81 Tbg. press 680 psi. Blew down; did not unload. Swabbing from bottom. Recovering about 1 bbl per run for 3 runs; Fluid is gas cut. After 2 hrs swabbing, pulling less than ½ bbl/run. Making 1 run every 45 min. Recovering 5-10 gal per run. Unseated packer. P.O.O.H. w/ tbg. and packer. Shut in. Prep to foam frac. Well making estimated 100 MCFGPD.

2-15-81 Rig up Western Co. Foam frac Chacra perfs as follows:

3024 gal + 11,775 SCF N_2 + 75 quality foam - pad
3024 gal + ½# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
3024 gal + 1# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
3024 gal + 1½# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
3024 gal + 2# 10-20 sand + 11,775 SCF N_2 + 75 quality foam
420 gal + 11,775 SCF N_2 + 75 quality foam - flush

Ave. treating pressure 2000 psi
Min. treating pressure 1950 psi
Max. treating pressure 2100 psi

Fluid injection rate 6.3 bbl/min.
ISDP 1500 psi 15 min shut in 1400 psi

Totals: 704,000 SCF N_2
170 gal Aqua flow
3000# KCL
160 gal Foamex
60,000# 10-20 sand

Opened well up thru 3/4" pos. chock after 2 hrs. shut in. Well gauged 705 MCFGPD after 19 hrs.

2-16-81 Shut down - Sunday

2-17-81 S.I. csg. pressure 915 psi. Ran BHP survey w/ B & R Wireline. W.O.O. - 4 hrs - open well up. Making 1 MMCF after 1½ hrs. Kill well; go in hole w/ tbg. Having trouble keeping well dead. Left open to pit. Prep to clean out to top of bridge plug at 2800'. Note B.H.P. 923 psi at 2748'.

2-18-81 Unable to reverse out sand; well taking fluid. Pulled out of hole. Start in hole w/ Baker Hydrostatic baler. Had trouble keeping well dead to pull out of hole. Unload and rack 1¼" tbg. Prep to clean out sand.

2-19-81 Cleaned out 40' w/ hydrostatic bailer - lost 10' (bailer plugged). P.O.O.H. Clean sand out of tbg. and rubber out of bailer. Go back in hole w/ Hydrostatic bailer. Cleaned out sand; latch on to and unseat bridge plug. Blew well to pit 1 hour and pull above Chacra perfs. Shut down. Left well open to pit over nite to blow down.

2-20-81 P.O.O.H. and lay down 2-3/8" tbg. and bridge plug. Rig up Welex. Set Baker model "F-1" production packer at 2766' RKB. Start trip in hole w/ 1¼" I.J. tbg. w/ seal assembly and blast joints and sliding sleeve. Shut down over night. Left well open to pit.

2-21-81 Finished running tubing as follows:

98 jts. 1¼" 2.3#, V-55, 10 Rd., I.J. tbg.	3179.68'
1 inner mandrel	2.90'
1 Baker seal assembly	2.90'
1 2-3/8" E.U.E. 8 Rd sub w/ coupling	2.10'
1 2-3/8" E.U.E. 8 Rd x 1¼ N.U. 10 Rd swedge	.25'
1 Baker Model "L" sliding sleeve	2.35'
2 jts. 1¼", 2.3#, V-55 10 Rd I.J. tbg.	64.94'
7 20' x 2.330 OD x 1.670 I.D. Bader blast jts.	140.00'
77 jts. 1¼" 2.3# V-55 10 Rd I.J. tbg.	2499.38'
4 6' 1¼" I.J. tbg. subs	23.60'
3 1' 1¼" I.J. tbg. subs	3.00'
1 jts. 1¼", 2.3# V-55, 10 Rd I.J. tbg.	30.81'
Total Equip.	595[illegible].91'
Top tbg. head to RKB	.09'
SET AT RKB	5959.00'

Pumped out plug. Shut well in. Released rig at 12:30 a.m. 2-20-81.

PREPARATION DATE: March 17, 1981

LEASE: Dustin

WELL NO: #1E

LOCATION: 1850' FSL, 1520' FEL

Sec 6, T29N-R12W

PPC WI% 100 NRI% 7935991

COUNTY: San Juan

STATE: New Mexico

OIL PURCHASER: Inland Corporation

PHONE:

GAS PURCHASER: Pioneer Natural Gas Company

PHONE: 806/378-3300

ALL MEASUREMENTS FROM KB

DATE Commenced Drilling: 1/12/81

DATE Released Rig: 1/21/81

DATE Completed (Ready to Produce) 3/10/81

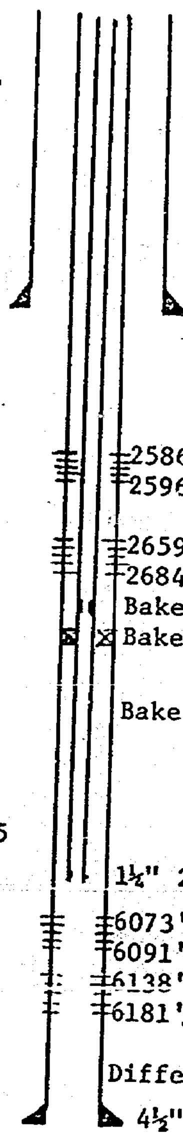
DATE OF FIRST PRODUCTION: WOP

PUMPER: Dugan Production Corporation

PHONE: 505/325-1821

Elevations: GL: 5484' DF: 5495' KB: 5496'

Surface Casing
8 5/8 "
411.6 ', 24 #K-55
________ ', ________ #,
________ ', ________ #,
Set at 423'
W/ 275 sxs CMT
Hole Size 12¼ "
CMT Top Surface
By Circulated



8 5/8" Csg @ 423'

INITIAL COMPLETION: 2/7/81 to 3/10/81

(SEE REVERSE)

2586'
2596'
2659'
2684'
} Chacra Perforations

Baker Model L Sliding Sleeve set @ 2763'
Baker Model F-1 Production Pkr set @ 2766'

Bakerline Stage Collar @ 4378'

1¼" 2.3#V-55 IJ 10 Rd Tbg set @ 5959'

6073'
6091'
6138'
6181'
} Dakota Perforations

Differential fill float collar @ 6269'

4½" Csg @ 6297'

Production Casing
4½ "
6303 ', 11.6 #, K-55
________ ', ________ #,
________ ', ________ #,
________ ', ________ #,
________ ', ________ #,
Set at 6297 '
W/ 1757 sxs CMT
Hole Size 7 7/8 "
CMT Top Surface '
By Circulated

PERFORATION RECORD
Chacra
2586-87-95-96
[illegible]-63-71
[illegible]2-84

[illegible]3-75-77-
[illegible]-91

[illegible]-42-
[illegible]7-59-

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 5

WELL NAME: Dustin #1E
TOTAL DEPTH: 6297'
PLUG BACK TD: 6270'

Reservoir Data - Dustin #1E

Basin Dakota - Farmington Chacra (Proposed Name)

San Juan County, New Mexico

Zone	Net Pay Thickness	Average Porosity	Average Connate Water	Initial Bottomhole Pressure	Reservoir Temperature	Reservoir Gas Gravity
Chacra	24 FT	13.5%	52.7%	921 psia	112°F	0.65
Dakota	41 FT	9.5%	32.2%	1342 psia	172°F	0.65

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 6

Proposed Allocation of Production
From Pioneer Production Corporation - Dustin No. 1E
To the Dakota and the Chacra Formations

	Dakota		Chacra	
	MCFPD	% of Total	MCFPD	% of Total
Well Test	696	59	485	41
CAOF	702	59	495	41

Recommend division of the commingled gas stream at the rate of 59% to the Dakota and 41% to the Chacra Formations.

Condensate production is considered insignificant from the Chacra Formation and all condensate production from the commingled stream should be assigned to the Dakota Formation.

APPLICATION FOR DOWNHOLE COMMINGLING
Pioneer Production Corp.
Dustin #1-E Well
Unit J, Sec. 6, T-29-N, R-12-W
San Juan County, New Mexico
Case No. 7214
Exhibit No. 7

Amoco Production Company
Denver Region
Amoco Building
17th & Broadway
Denver, Colorado 80202
303-830-4040

RECEIVED
APR 1 1981
OIL CONSERVATION DIVISION
SANTA FE

March 30, 1981

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

File: HDM-38-986.511

Case 7214

Dear Mr. Ramey:

Application for Downhole Commingling
Pioneer Production Corp. Dustin No. 1E
Basin Dakota and Undesignated Chacra
San Juan County, New Mexico

This is to advise that Amoco Production Company, as an offset operator, has no objection to the proposed downhole commingling of Basin Dakota and Chacra production in Pioneer's Dustin No. 1E, Section 6, T29N, R12W.

We understand this matter will be heard on April 8, 1981.

Yours very truly,

Vinton D. Pierce

Vinton D. Pierce

VDP:jah

BB990

cc: Pioneer Production Corp.
P. O. Box 2542
Amarillo, TX 79189
Attn: W. A. Scott

Dockets Nos. 14-81 and 15-81 are tentatively set for April 22 and May 6, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 8, 1981

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

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

CASE 7086: (Continued from the January 14, 1981, Examiner Hearing)

Application of Blackwood & Nichols Company, Ltd. for designation of a tight formation, San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks the designation of the Pictured Cliffs formation underlying portions of Townships 30 and 31 North, Ranges 6, 7, and 8 West, containing 33,500 acres, more or less, as a tight formation pursuant to Section 107 of the Natural Gas Policy Act and 18 CFR Section 271.701-705.

CASE 7210: Application of Gulf Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the East Hat Mesa Unit Area, comprising 2197 acres, more or less, of State and Federal lands in Township 21 South, Range 33 East.

CASE 7211: Application of Gulf Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the North Rock Lake State Unit Area, comprising 280 acres, more or less, of State land in Township 22 South, Range 35 East.

CASE 7212: Application of Bass Enterprises Production Co. for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Poker Lake Unit Well No. 50 located in Unit C of Section 4, Township 25 South, Range 31 East, to produce gas from the Atoka and Wolfcamp formations through the tubing and casing-tubing annulus, respectively.

CASE 7213: Application of Exxon Company USA for a dual completion and downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its J. L. Greenwood Well No. 13 located in Unit L of Section 9, Township 22 South, Range 37 East, to produce oil from the Brunson-Fusselman Pool through tubing and commingled Blinebry and Tubb production through the casing-tubing annulus.

CASE 7214: Application of Pioneer Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Chacra and Basin-Dakota production in the wellbore of its Dustin Well No. 1E located in Unit J of Section 6, Township 29 North, Range 12 West.

CASE 7215: Application of Amoco Production Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox Wolfcamp-Penn location of its Willow Lake Unit Well No. 4Y to be drilled 1980 feet from the South line and 660 feet from the West line of Section 14, Township 24 South, Range 28 East, the S/2 of said Section 14 to be dedicated to the well.

CASE 7216: Application of Amoco Production Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Gallup and Chacon-Dakota production in the wellbore of its Jicarilla 396 Well No. 1 located in the NE/4 of Section 8, Township 23 North, Range 3 West.

CASE 7217: 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 Morrow location of its Travis Ohio State Com Well No. 1 to be drilled 660 feet from the South and West lines of Section 13, Township 18 South, Range 28 East, the S/2 of said Section 13 to be dedicated to the well.

CASE 7218: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox Wolfcamp-Penn location of its Federal "BQ" Well No. 7 to be drilled 660 feet from the North line and 990 feet from the West line of Section 27, Township 17 South, Range 25 East, the N/2 of said Section 27 to be dedicated to the well.

CASE 7165: (Readvertised)

Application of ARCO Oil and Gas Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Ellenburger, Strawn, McKee, and Devonian formations, Langley Field, underlying the N/2 of Section 33, Township 22 South, Range 36 East, 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

PIONEER
PRODUCTION CORPORATION

FIRST NATIONAL PLACE / P. O. BOX 2542, AMARILLO, TEXAS 79189 / (806) 376-5891

W. A. SCOTT
VICE PRESIDENT-OPERATIONS

RECEIVED
MAR 17 1981
OIL CONSERVATION DIVISION
SANTA FE

March 13, 1981

Case 7214

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

RE: PIONEER PRODUCTION CORPORATION
APPLICATION FOR HEARING ON APRIL 8, 1981
DOWNHOLE COMMINGLING
BASIN DAKOTA & UNDESIGNATED CHACRA POOLS
DUSTIN NO. 1E WELL
SAN JUAN COUNTY, NEW MEXICO

Dr. Mr. Nutter:

Attached for your review and handling is Pioneer Production Corporation's application for a hearing on April 8, 1981 to grant approval for Downhole Commingling on the DUSTIN NO. 1E well.

Mr. Tom Dugan with Dugan Production Corporation and Mr. Keith Selinger with Pioneer Production Corporation will represent Pioneer Production Corporation at the hearing.

If you have any questions regarding this matter, please contact Mr. Selinger. Phone: 806/378-3300, extension 652.

Very truly yours,

W. A. Scott

RDR/gn

attachments

xc: Dugan Production
Offset Operators (Address List Attached)
WF, RLI, JWG, KAS, RDR, NMOCC, USGS

ADDRESS LIST

Offset Operators

Amoco Production Company
501 Airport Drive
Petroleum Center Bldg.
Farmington, New Mexico 87401

El Paso Natural Gas Company
P. O. Box 990
Farmington, New Mexico 87401

Dugan Production Corporation
Box 208
Farmington, New Mexico 87401

Pioneer Production Corporation
Box 2542
Amarillo, Texas 79189

Southern Union
Box 750
Farmington, New Mexico 87401

Mesa Petroleum
1 Mesa Square
Box 2009
Amarillo, Texas 79189

Dempsey & Associates
310 Mid Continent Bldg.
Tulsa, Oklahoma

Benson-Montin-Greer Drilling Corporation
501 Airport Drive
Farmington, New Mexico 87401

Texaco, Inc.
Box 728
Hobbs, New Mexico
Attn: John Gannon

New Mexico Oil Conservation Commission
1000 Rio Brazos Road
Aztec, New Mexico 87410

United States Geological Survey
Farmington District Office
Box 959
Farmington, New Mexico 87401

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

In the matter of the application of
Pioneer Production Corporation for downhole
commingling of the Dustin No. 1E
in San Juan County, State of New Mexico

APPLICATION

Pursuant to rule 303 C of the rules and regulations of the State of New Mexico Oil Conservation Division, the applicant, Pioneer Production Corporation by and through its Vice President of Operations, Mr. W. A. Scott, hereby makes application for approval of downhole commingling in the wellbore of the Dustin No. 1E in San Juan County, New Mexico.

The applicant further states:

(1) The operator of the Dustin No. 1E well will be the applicant, Pioneer Production Corporation whose address is:

P. O. Box 2542, Amarillo, Texas 79189

(2) The Dustin No. 1E well will be located on a Fee Oil and Gas Lease insofar as said lease covers the following described lands:

T29N, R12W, NMPM

Section 6; Proration Unit S/2
Basin Dakota Pool

Section 6; Proration Unit SE/4
Undesignated Chacra Pool

San Juan County, New Mexico

(3) Legal location of the Dustin No. 1E well will be as follows:

T29N, R12W, NMPM
Section 6, Unit letter J
San Juan County, New Mexico

(4) The Dustin No. 1E well is not currently dually completed in the Basin Dakota Pool and the Undesignated Chacra Pool.

(5) The Dustin No. 1E well will be capable of only low marginal production from the Basin Dakota Pool and will be capable of only low marginal production from the Undesignated Chacra Pool.

(6) The ownership of the above mentioned Pools is common.

(7) The proposed commingling from the above mentioned Pools will result in the recovery of additional hydrocarbons, the prevention of waste and the protection of correlative rights.

(8) All operators of the leases offsetting the dedicated acreage for this well, the United States Geological Survey and the supervisor of the District III Office of the New Mexico Oil Conservation Commission have been mailed a copy of this application.

Wherefore, the applicant requests this application be set for hearing on April 8, 1981 and that after said hearing the New Mexico Oil Conservation Commission grant this application by giving approval of the downhole commingling of the Dustin No. 1E well in San Juan County, New Mexico.

Respectfully Submitted

W. A. Scott
Vice President of Operations

dr/

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. 7214

Order No. R-6653

APPLICATION OF PIONEER PRODUCTION CORPORATION

FOR DOWNHOLE COMMINGLING, SAN JUAN

COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on April 8, 19 81, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this _____ day of April, 1981, 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, Pioneer Production Corporation, is the owner and operator of the Dustin Well No. 1E, located in Unit J of Section 6, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico.

(3) That the applicant seeks authority to commingle Chacra and Basin-Dakota production within the wellbore of the above-described well.

(4) That from the Chacra zone, the subject well is capable of low ~~marginal~~ rate of production only.

(5) That from the Basin-Dakota zone, the subject well is capable of low ~~marginal~~ rate of production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, _____ percent of the commingled _____ production should be allocated to the Chacra zone, and _____ percent of the commingled _____ production to the Basin-Dakota zone.

(ALTERNATE)

(9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pioneer Production Corporation, is hereby authorized to commingle Chacra and Basin-Dakota production within the wellbore of the Dustin Well No. 1E, located in Unit J of Section 6, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells.

(ALTERNATE)

(2) That _____ percent of the commingled _____ production shall be allocated to the Chacra zone and _____ percent of the commingled _____ production shall be allocated to the Basin-Dakota zone.

(3) That the operator of the subject well shall immediately notify the Division's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

(4) 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.