CASE 6727: CONOCO INC. FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO

Case Number

6720

Application

Transcripts.

Small Exhibits

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
14 November 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Conoco, Inc. for salt water disposal. Lea County, New Mexico. CASE 6727

BEFORE: Daniel S. Nutter

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 for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant: Jason Kellahin, Esq.
KELLAHIN & KELLAHIN
500 Don Gaspar
Santa Fe, New Mexico 87501

I N D E X

E X H I B I T S

MR. NUTTER: Call Case Number 6727.

MR. PADILLA: Application of Conoco, Inc. for salt water disposal, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, I'm Jason Kellahin, appearing on behalf of the applicant. I have one witness.

(Witness sworn.)

LOWELL B. DECKERT

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Would you state your name, please?

A. Lowell B. Deckert.

Q. By whom are you employed and in what position, Mr. Deckert?

A. I'm employed by Conoco, Incorporated, as a Senioe Staff Engineer in Hobbs, New Mexico.

Q. And have you testified before the Oil Conservation Division and had your qualifications made a matter of record?

A. Yes.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q. Mr. Deckert, are you familiar with the application of Conoco, Incorporated, in Case Number 6727?

A. Yes, I am.

Q. What does the applicant propose in this case?

A. Case Number 6727 is the application of Conoco for approval to convert our Anderson Ranch Unit Well No. 8 from a shut-in salt water disposal well in the Anderson Ranch Wolfcamp Pool to a salt water disposal in the Anderson Ranch Wolfcamp Undesignated Mississippian and Anderson Ranch Devonian Pools.

Q. Now would you give the Examiner a brief history of this well?

A. Yes. The Anderson Ranch Unit No. 8 Well was drilled in May of 1954 to a total depth of 13,689 feet in the Devonian.

The Devonian production test yielded only a small show of oil and gas. The well was temporarily abandoned in June of '54. In July, 1956 an attempt was made to complete in the Pennsylvanian Bend or Morrow Sand. This test resulted in only a show of gas.

In August, 1956 a Mississippian tested

salt water with no hydrocarbons. The subject well was unsuccessfully tested in the Wolfcamp formation and was subsequently converted to a salt water disposal well in the Wolfcamp by authority of Order Number R-2078, dated October 9th, 1961, with disposal through Lower Wolfcamp perfs authorized by letter from the Secretary-Director, dated September 5th, 1962.

Q. Now referring to what has been marked the applicant's Exhibit Number One, would you identify that exhibit, please?

A. Okay. Exhibit One is a location plat showing the case well, which is located 1980 feet from the south line, 660 feet from the east line, of Section 11, Township 16 South, Range 32 East, Lea County, New Mexico.

This plat also shows all other wells on the lease with the designation "W" showing the Wolfcamp producers; "D" designating Devonian producers; and "M" designating Morrow producers.

Q. Now, why does Conoco want to convert this salt water disposal well?

A. There are basically two reasons. First of all, all potentially productive horizons have been tested in this well with no commercial quantities of hydrocarbons shown.

Second, the Anderson Ranch Unit Well No. 16

is currently the only salt water disposal well on this lease. It has recently experienced mechanical problems and it is no longer serviceable.

Water disposal requirements are extensive and the two Devonian wells are currently shut-in for this reason.

Q. Now, referring to what has been marked as Exhibit Number Two, would you identify that exhibit, Mr. Deckert?

A. Yes. Exhibit Two shows the volume of water being disposed of into salt water disposal well No. 16.

Q. Now, referring to Exhibit Number Three, what is that?

A. Exhibit Three is the present wellbore schematic for the Anderson Ranch Well No. 8, and this well is currently shut-in.

Q. Now, didn't you previously state that you have the Division's approval to use the well for a Wolfcamp salt water disposal?

A. Yes. Yes, we do by Order R-2078.

Q. But you're not using it, is that correct?

A. That's right.

Q. And why is that?

A. Well No. 8 was initially converted to salt

water disposal in the Wolfcamp zone through perforations 9776 to 9816. When the well was placed on water disposal the surface injection pressure increased to 2850 pounds within 10 minutes after injection was started.

The well was then additionally perforated in the Wolfcamp from 9970 to 10,333 feet and used as a disposal well for a period of approximately two years. The last month in which we disposed of water in this well was August, 1964, and at that time the surface injection pressure had increased to 3000 pounds. This increased pressure in No. 8 made it unfit for use as a disposal well.

Mechanical problems in Well No. 9, which is located, by the way, in "D" of Section 12, a San Andres disposal well, made it unfit for disposal, so we converted Well No. 16 to salt water disposal.

Now mechanical problems in No. 16 dictate that we return to No. 8 and open up additional intervals in order to provide adequate produced water disposal for this lease.

As a matter of information, our records show that the Morrow zone was tested at one time for -- from 12,173 to 192 feet. These perforations were cement squeezed. We do not want to inject water into the Morrow, so we plan to pressure test these perforations and then requeeze, if necessary.

Q. Now, referring to Exhibit Number Four, would you identify that exhibit, please?

A. Yes. Exhibit Number Four is a downhole schematic, showing how we propose to complete Well No. 8 for a salt water disposal.

The formations open will be the Wolfcamp, Undesignated Mississippian, and the Devonian. There are no producing wells in the Mississippian.

Q. Now, referring to what has been marked as Exhibit Number Five, would you identify that exhibit?

A. Exhibit Five is a log section for Anderson Ranch Unit Well No. 8 and shows the intervals that are open and will be open for disposal. For instance, it shows the top of the Sanders lime of the Wolfcamp formation with present perforations, the top of the Mississippian, and the Mississippian perforations, top of the Devonian, and the proposed Devonian perforations.

Q. Now, referring to Exhibits Nos. Six and Seven, would you discuss those exhibits, please?

A. Exhibit Six is a structure map on the top of the Sanders limestone of the Wolfcamp formation and it shows Well No. 8 located along the south edge and structurally low to the other Wolfcamp wells in the unit.

I'd like to point out that the three wells immediately north of Well No. 8 are Wolfcamp waterflood in-

jection wells.

Exhibit Number Seven is a structure map on the top of the Devonian. It again shows Well No. 8 down structure from the closest Devonian Well No. 1 to the northwest.

The four Devonian wells shown on Exhibit Seven and four other wells also tested the Devonian, but these aren't shown on the exhibit; however, they contibuted to the development of this structure map.

Q. Now will you refer to Exhibit Number Eight and explain that?

A. Exhibit Number Eight is a water analysis of the water to be disposed of into this well.

Q. Is that a corrosive water?

A. Yes.

Q. Will you inject through the tubing, internally coated tubing?

A. Yes.

Q. And the casing-tubing annulus will be filled with an inert fluid?

A. An inert fluid, right.

Q. Now what is the volume of oil being produced from the lease?

A. Okay. From the Devonian we've produced approximately 22-to 2700 barrels of oil per month, and 3200

to 4000 barrels of oil per month from the Wolfcamp.

I'd like to point out again that the Devonian wells are currently shut-in because of a lack of disposal facilities.

Q. And approval of a disposal well is essential to get the Devonian wells back on production, is that correct?

A. That's right.

Q. Were Exhibits One through Eight, inclusive, prepared by you or under your supervision?

A. Yes, they were.

MR. KELLAHIN: At this time we offer Exhibits One through Eight, inclusive.

MR. NUTTER: Exhibits One through Eight will be admitted in evidence.

MR. KELLAHIN: That's all we have on this case, Mr. Nutter.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Mr. Deckert, No. 16 is still being used for disposal, is it?

A. Not right now, no, sir.

Q. It appears from the tabulation on Exhibit Number Two that the well was taking water fairly well, a

couple of thousand barrels a day, anyway, up until maybe August or September, possibly.

A. Well, September is when we first had problems with this well and it was at that point we went ahead and shut our Devonian wells in.

Q. And what zone is disposable in the -- in the -- is the No. 16 disposing into?

A. It's disposing into the Wolfcamp.

Q. Lower Wolfcamp?

A. Uh-huh.

Q. You never have disposed into the Devonian here, then?

A. No.

Q. And now the No. 9 over here in Section 12, it's an old salt water disposal well, too, isn't it?

A. It was, yes. It was an old disposal well in the San Andres at one time.

Q. That's a San Andres well?

A. Uh-huh. It's plugged and abandoned now.

Q. Now, this schematic here of your No. 8 Well, which is Exhibit Number Three, shows the uppermost perforations in the Wolfcamp to be at 9776, I believe.

A. Uh-huh, to 9816.

Q. Uh-huh.

A. Right.

Q. And we show 5-1/2 inch pipe was run to 13,688 with the top of the cement at 7460. Do you know how that cement top was determined?

A. It was from a temperature survey.

Q. So if, indeed, the cement is to that point you have 2500 feet, or 2400 feet, of cement above the top perforation there.

A. Yeah, above the top of the Wolfcamp, Wolfcamp perfs, right.

Q. Now, on Exhibit Number Four, which is the way you would propose to equip the well for disposal, you mentioned some Morrow perfs. Now, what were those perfs again?

A. 12,173 to 192.

Q. 173 to 12,192, and those perfs have been previously squeezed?

A. Yes.

Q. And you will resqueeze them?

A. Well, we're going to re-test -- we're going to pressure test them and determine if they need to be resqueezed, since we do have a Morrow gas well in this.

Q. So that interval would be opposite your -- or inside of your gross interval that you'd be disposing of, or disposing into, right?

A. Uh-huh.

Q. Then on your Exhibit Number Six, you mentioned some water injection wells in the Wolfcamp for flooding purposes?

A. Yes, those are --

Q. Would that be the wells with the triangles on them?

A. Right, Wells 3, 6, and 10.

Q. So there's three wells on the east side there of the pool that you're disposing into -- or injecting into the Wolfcamp?

A. Right.

Q. And you'd also be injecting into the Wolfcamp in the subject well?

A. Right.

Q. And then on the next exhibit, Number Seven, I see three current Devonian wells, is that correct?

A. Well, there are only two current Devonian producers, and that's Well No. 1 and 14.

Q. What about the Gulf CLA Well up there at the north end?

A. Yes. It is a --

Q. It's a Devonian producer also?

A. Yes, it is, uh-huh.

Q. So there's three Devonian wells in this pool?

A. Three Devonian wells in this pool, right.

Q. Would you be disposing of Devonian water only into this well?

A. Well, it would be combined stream of Devonian and Wolfcamp production.

Q. Well, how do -- do you produce more from the Wolfcamp than you're injecting into the Wolfcamp on your flood?

A. No, no. But the water all comes together and is mixed, so --

Q. Oh, the Devonian and the Wolfcamp waters are mixed?

A. Yes, uh-huh.

Q. And you don't need all of the water that's produced for your Wolfcamp flood?

A. Right.

Q. So what amount of water will be injected into the No. 8 when you put it on disposal?

A. I would think something in the order of 1500 barrels a day.

Q. And at what pressure do you expect to put that water in?

A. I wouldn't see that we would need to go above 2000 pounds.

MR. NUTTER: Are there any further questions

of this witness? He may be excused.

Did you have anything further, Mr. Kellahin?

MR. KELLAHIN: That's all I had.

MR. NUTTER: Does anyone have anything they wish to offer in Case Number 6727?

We'll take the case under advisement.

(Hearing concluded.)

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3010 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

REPORTER CERTIFICATE

I, SALLY W. BOYD, A Certified Shorthand Reporter, DO HEREBY CERTIFY that the foregoing and attached 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 from my notes taken at the time of the hearing.

Sally W. Boyd C.S.R.
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. 6727 heard by me on Nov 14 1979.

, Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
14 November 1979

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I N D E X

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MR. PADILLA: Application of Conoco, Inc. for salt water disposal, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, I'm Jason Kellahin, appearing on behalf of the applicant. I have one witness.

(Witness sworn.)

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Q. And have you testified before the Oil Conservation Division and had your qualifications made a matter of record?

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A Yes, they were.

MR. KELLAHIN: At this time we offer Exhibits One through Eight, inclusive.

MR. NUTTER: Exhibits One through Eight will be admitted in evidence.

MR. KELLAHIN: That's all we have on this case, Mr. Nutter.

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MR. NUTTER: Are there any further questions

of this witness? He may be excused.

Did you have anything further, Mr. Kellahin?

MR. KELLAHIN: That's all I had.

MR. NUTTER: Does anyone have anything they wish to offer in Case Number 6727?

We'll take the case under advisement.

(Hearing concluded.)

REPORTER CERTIFICATE

I, SALLY W. BOYD, A Certified Shorthand Reporter, DO HEREBY CERTIFY that the foregoing and attached 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 from my notes taken at the time of the hearing.

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6727, heard by me on 11/14 19 79.

, Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

November 27, 1979

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

Re: CASE NO. 6727
ORDER NO. R-6195

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

Applicant:

Conoco 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 OCD x
Artesia OCD x
Aztec OCD

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. 6727
Order No. R-6195

APPLICATION OF CONOCO INC. FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 14, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of November, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Conoco Inc., is the owner and operator of the Anderson Ranch Unit Well No. 8, located in Unit I of Section 11, Township 16 South, Range 32 East, NMPM, Anderson Ranch Field, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Wolfcamp, Mississippian and Devonian formations, with injection into the overall interval from approximately 9,776 feet to 13,620 feet.

(4) That the injection should be accomplished through 2 7/8-inch plastic lined tubing installed in a packer set at approximately 9,700 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(5) That the injection well or system should be equipped with a pressure limiting switch or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 1995 psi.

(6) That the operator should notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(7) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(8) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Conoco Inc., is hereby authorized to utilize its Anderson Ranch Unit Well No. 8, located in Unit I of Section 11, Township 16 South, Range 32 East, NMPM, Anderson Ranch Field, Lea County, New Mexico, to dispose of produced salt water into the Wolfcamp, Mississippian, and Devonian formations, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 9,700 feet, with injection into the overall interval from approximately 9,776 feet to 13,620 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) That the injection well or system shall be equipped with a pressure limiting switch or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 1995 psi.

(3) That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(4) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(5) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Division Rules and Regulations.

(6) 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

dr/

Hugh Ingram 10/24:

Wolfcamp 9775 – 10335

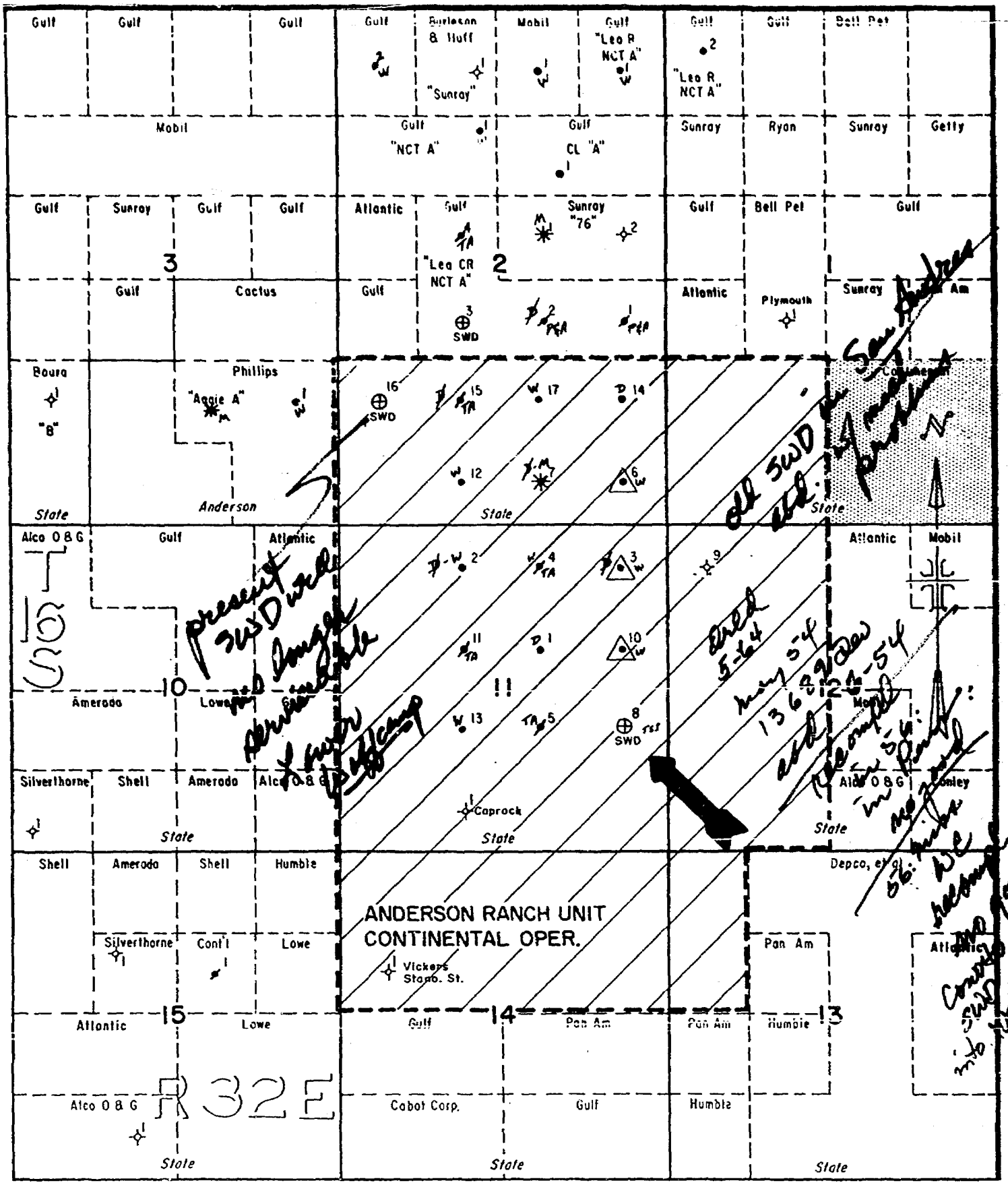
Ag Morrow

Mississippian 12525 - 12590

Devonian 13400 - 13620

plastic coated 2 3/8-inch set at 9675'

EXHIBIT NO. 1



W - Wolfcamp
M - Morrow
D - Devonian
Ø - Penetrated Devonian

CONTINENTAL OIL COMPANY
PRODUCTION DEPARTMENT — HOBBS DIVISION
ANDERSON RANCH UNIT
LEA COUNTY, NEW MEXICO
SCALE 0' 1000' 2000'

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 1
CASE NO. 6727

EXHIBIT NO. 2

ANDERSON RANCH UNIT
MONTHLY WATER DISPOSAL REPORT

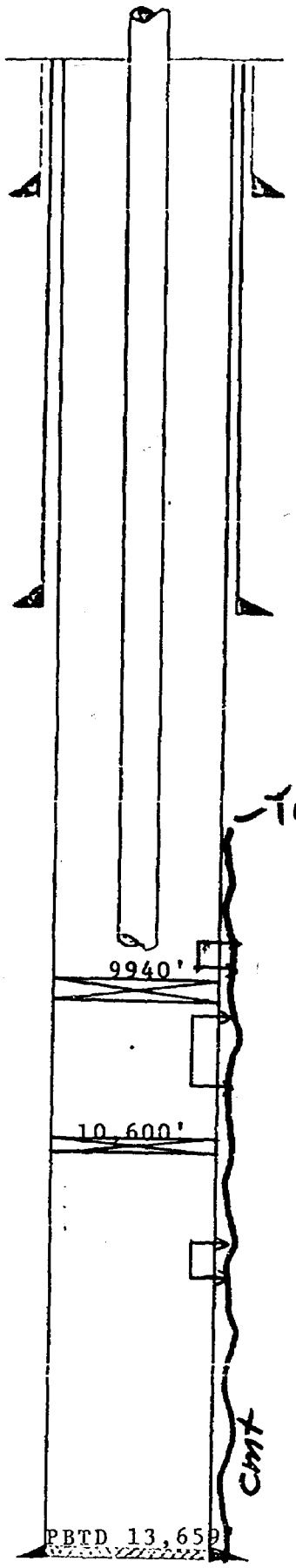
Well No. 16

Month	Volume	Pressure	Cumulative Ending
1978			
October	26,784	350	
November	47,772	580	
December	23,353	350	
1979			
January	12,388	0	
February	18,395	250	
March	20,112	250	
April	25,942	220	
May	1,771	200	
June	63,539	200	
July	62,510	200	
August	45,985	200	
September	9,808	200	12,066,238

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 2
CASE NO. 6727

EXHIBIT NO. 3

ANDERSON RANCH UNIT #8
1980' FSL & 660' FEL Sec 11-165-32 E



13 3/8" 48# Casing set at 606'. Cement Circ.

9 5/8" 40# Casing set at 4248'. Cement Circ.

Top cmt 7460

2 7/8" Tubing at 9909'.

9776'
9816' Wolfcamp interval 9776'-10,333'
Cement Retainer at 9940'
9970'
Perforated at 9970'-9975'; 10,015'- 10,025'; 10,050'-10,060'; 10,090'-10,100'; 10,325'- 10,333'.

Bridge Plug at 10,600'

12,528' 12,528'-12,545'; 12,574'-12,588'
12,588' Mississippian interval

5 1/2" 17#, 20#, 23# Casing set at 13,688'. TOC at 7460'.

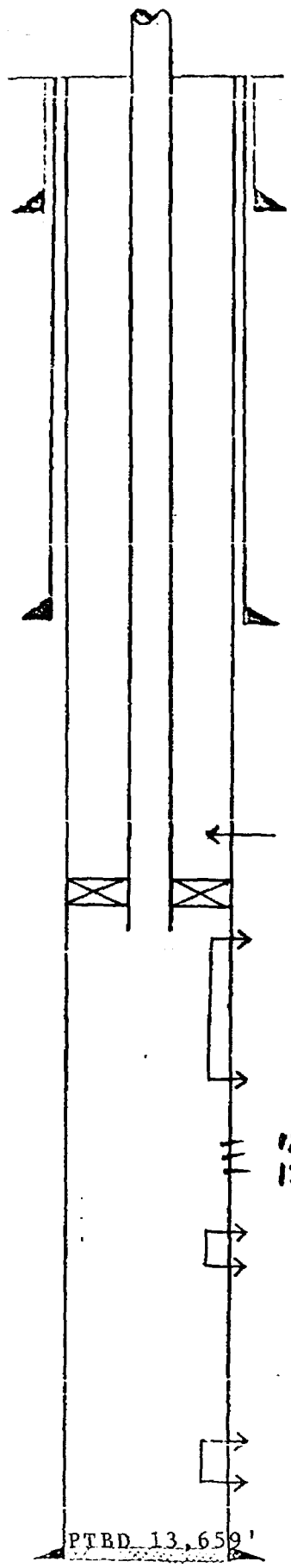
by Temp Survey

PRESENT

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 3
CASE NO. 6727

EXHIBIT NO. 4

ANDERSON RANCH UNIT #8
1980' FSL & 660' FEL Sec 11-165-32 E



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will dispose 1500 BPD 2000 psi

Inhibited packer fluid.

2 7/8" tubing and packer at ±9700'.
9976'

Wolfcamp interval.

10,333'

tested and possibly

12173
12192 morrow perfs will be re-squeezed

12,258'
12,588' Mississippian interval.

13,400' Devonian interval.
13,620'

PTBD 13,659'

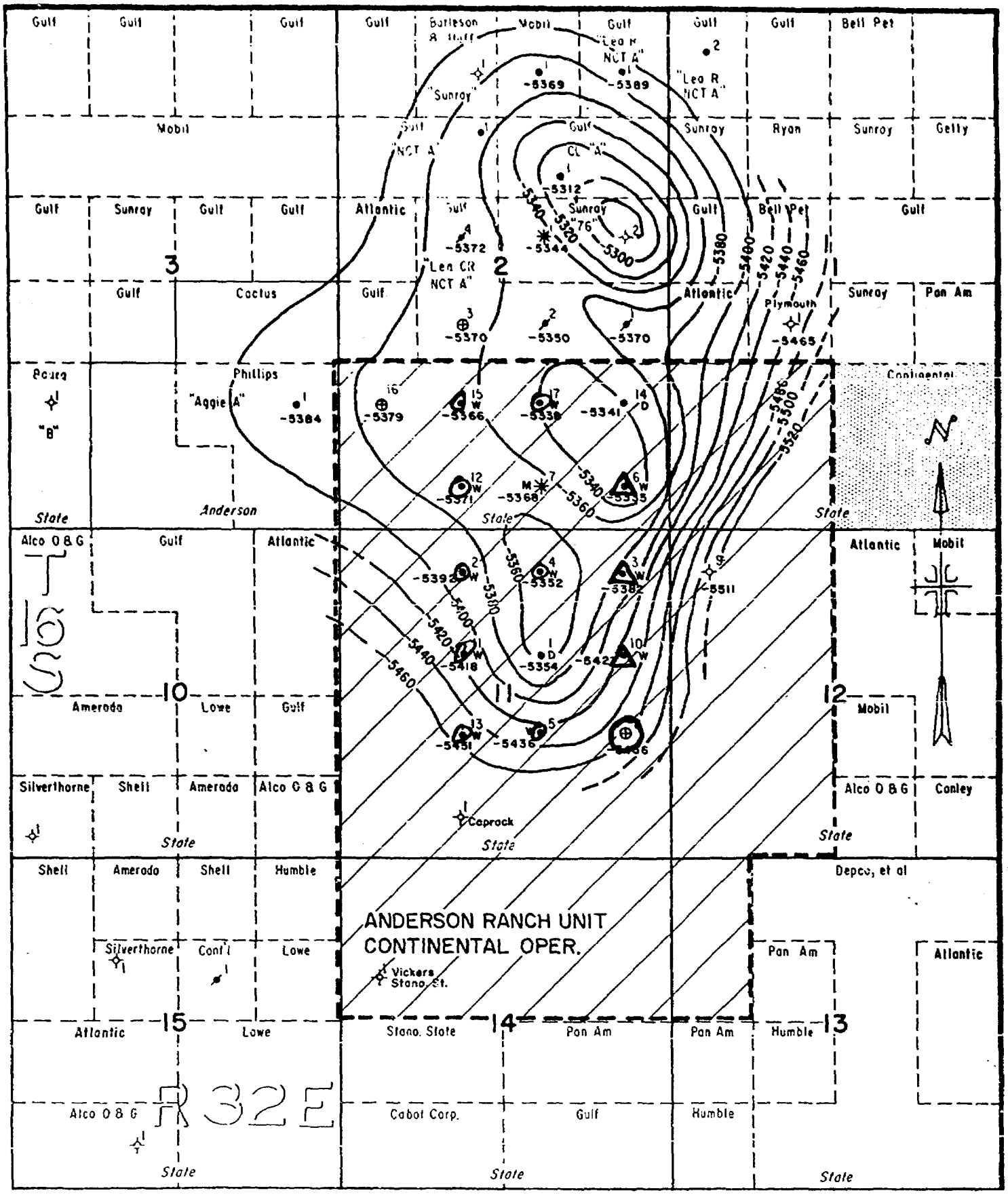
5 1/2" 17#, 20#, 23# Casing set at 13,688'. TOC at 7460'

PROPOSED

9976
9952

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 4
CASE NO. 6727

EXHIBIT NO. 6



W-WOLFCAMP PRODUCER
D-DEVONIAN PRODUCER

CONTINENTAL OIL COMPANY

PRODUCTION DEPARTMENT — HOBBS DIVISION

ANDERSON RANCH UNIT

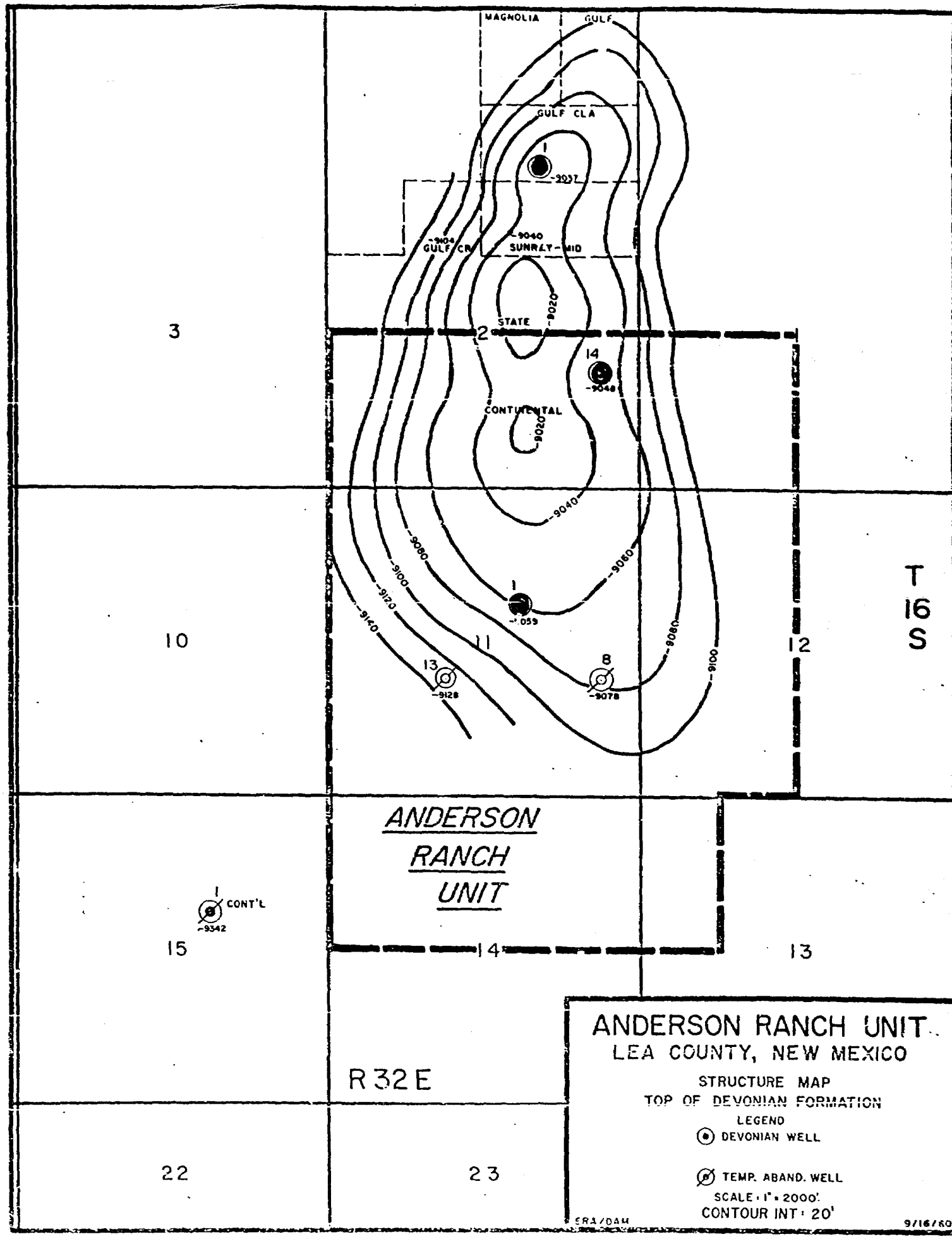
LEA COUNTY, NEW MEXICO

STRUCTURE MAP
TOP OF SAUNDERS LIMESTONE
WOLFCAMP FORMATION
CONTOUR INT: 20'

SCALE
0 1000 2000

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 6
CASE NO. 6727

EXHIBIT NO. 7



ANDERSON RANCH UNIT
LEA COUNTY, NEW MEXICO
STRUCTURE MAP
TOP OF DEVONIAN FORMATION
LEGEND
DEVONIAN WELL
TEMP. ABAND. WELL
SCALE: 1" = 2000'
CONTOUR INT: 20'
ERA/DAH
9/16/60

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc EXHIBIT NO. 7
CASE NO. 6727

EXHIBIT NO. 8

NALCO

ANALYTICAL SERVICE LABORATORY REPORT

WATER ANALYSIS

Company: CONOCO OIL COMPANY
HOBBS, NEW MEXICO
DIST. 6-5

Date Printed 30-Jun-77
Analysis No. 77V1259,B
Date Sampled 5-25-77
Date Received 6-20-77

Sample Marked: ARU DISPOSAL DEV & WC

WATER ANALYSIS

DISSOLVED SOLIDS CATIONS	mg/l	meq/l	RESULTS AS COMPOUNDS	mg/l
Sodium,Na(calc.)	20200.	877.		
Calcium,Ca	1520.	76.0	as CaCO3	3800.
Magnesium,Mg	389.	32.0	as CaCO3	1600.
Barium,Ba	.0	.0	as BaSO4	.0
Sum of Cations	22100.	985.		
ANIONS				
Chloride,Cl	33400.	940.	as NaCl	55000.
Sulfate,SO4	1690.	35.2	as Na2SO4	2500.
Carbonate,CO3			as CaCO3	
Bicarbonate,HCO3	590.	9.7	as CaCO3	484.
Sum of Anions	35700.	985.		
TDS CALCULATED	57800.			
Total Iron,Fe	1.5	.1	as Fe	1.5
Acid to Phen,CO2	24.6	.6	as CaCO3	56.0

OTHER PROPERTIES		CaCO3 STABILITY (Index)		CaSO4 SOLUBILITY (meq/l)
pH (units)	6.8	-.2	@ 70F	-33.5
Spec Gravity	1.030	.5	@120F	-33.4
Turbidity (jtu)	1.6	1.2	@170F	-30.5

Remarks:

3 E. G. QUINN
M. G. HARKER

P. O. BOX 87 • SUGAR LAND, TEXAS 77478

NALCO CHEMICAL COMPANY
REGIONAL ANALYTICAL LABORATORIES

2111 E. Dominguez St.
Carson, CA 90745

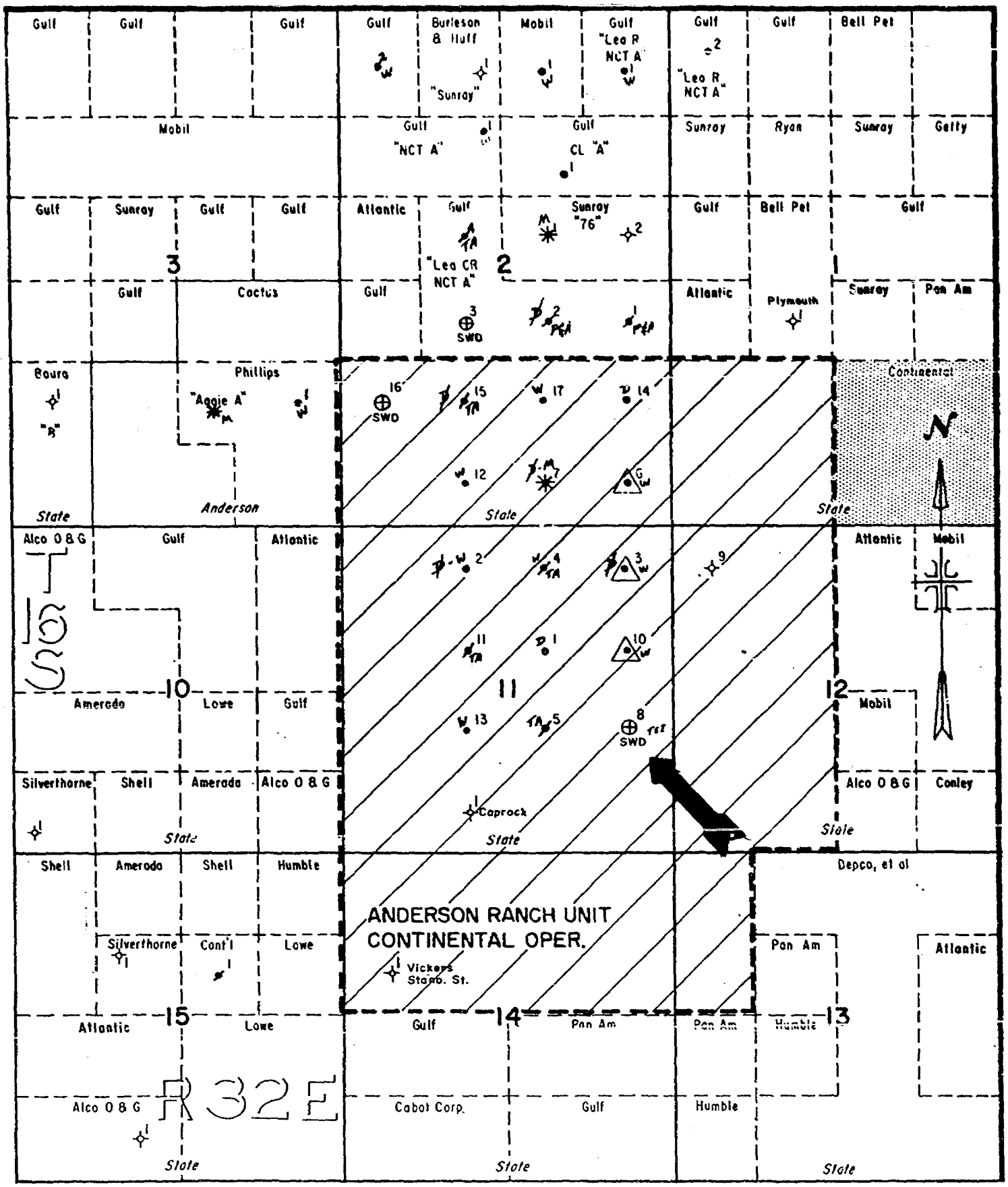
6216 W. 66th Place
Chicago, Illinois 60638

Box 16A
Paulsboro, NJ 08066

Box 87
Sugar Land, TX 77478

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 8
CASE NO. 6727

EXHIBIT NO. 1



W - Wolfcamp
M - Morrow
D - Devonian
Ð - Penetrated Devonian

CONTINENTAL OIL COMPANY
PRODUCTION DEPARTMENT — HOBBS DIVISION
ANDERSON RANCH UNIT
LEA COUNTY, NEW MEXICO

SCALE
0' 1000' 2000'

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 1
CASE NO. 6727

EXHIBIT NO. 2

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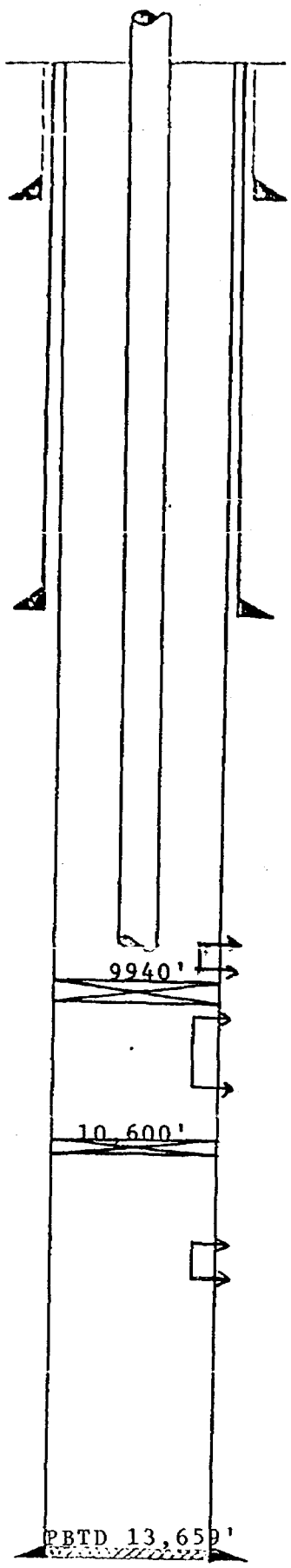
OIL CONSERVATION DIVISION
Conoco Inc EXHIBIT NO. 2
CASE NO. 6727

EXHIBIT NO. 3

ANDERSON RANCH UNIT #8
1980' FSL & 660' FEL Sec 11-165-32 E



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Perforated at 9970'-9975'; 10,015'- 10,025'; 10,050'-10,060'; 10,090'-10,100'; 10,325'- 10,333'.

Bridge Plug at 10,600'

12,528' 12,528'-12,545'; 12,574'-12,588'
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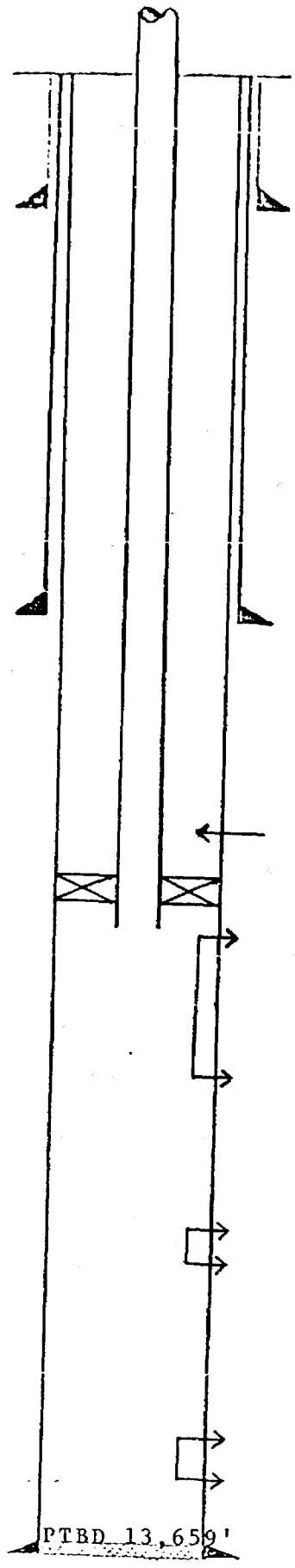
PRESENT

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 3
CASE NO. 6727

EXHIBIT NO. 4

ANDERSON RANCH UNIT #8
1980' FSL & 660' FEL Sec 11-165-32 E



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Wolfcamp interval.

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9976
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1995.2

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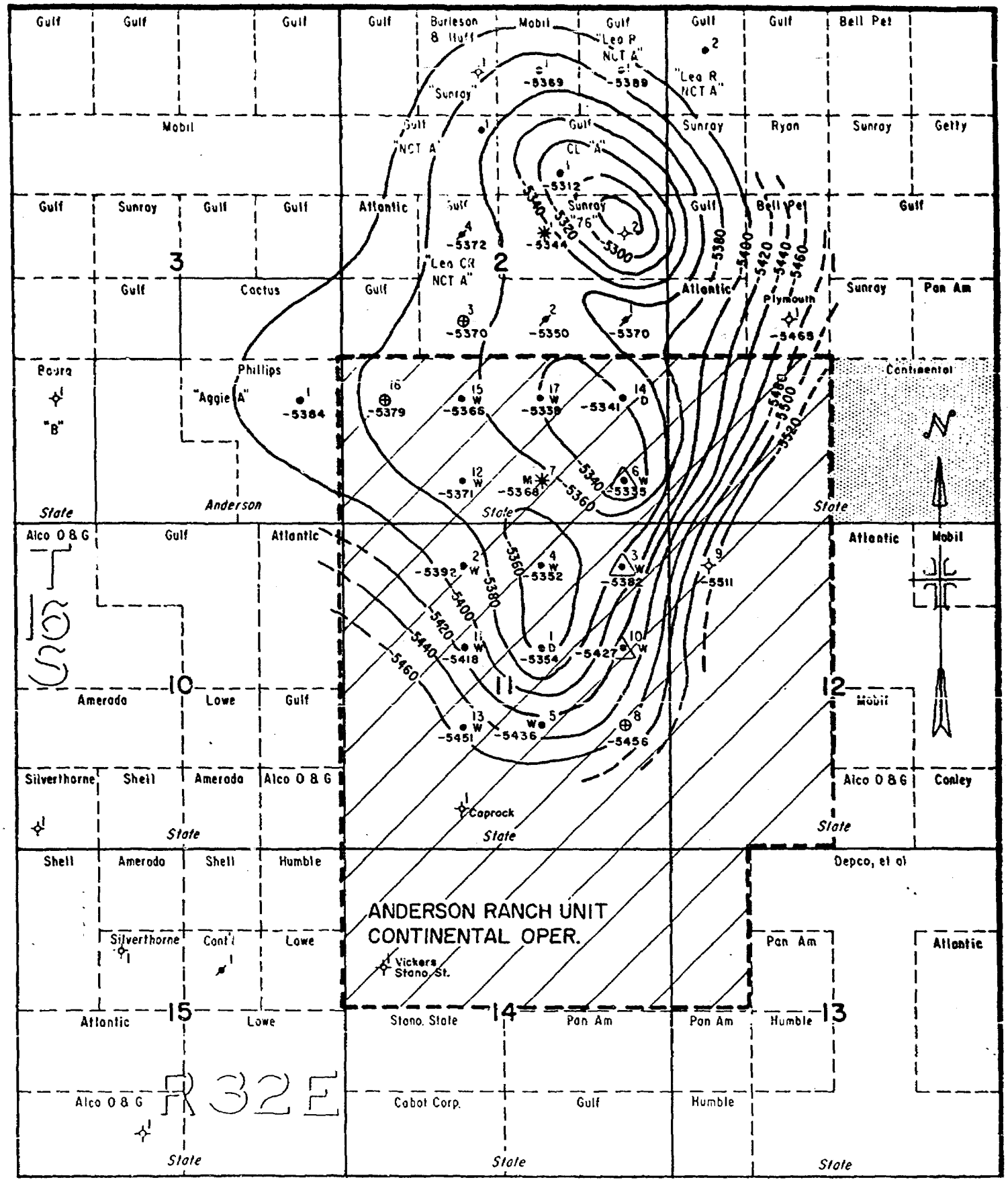
PROPOSED

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 4
CASE NO. 6727

EXHIBIT NO. 6



W-WOLFCAMP PRODUCER
D-DEVONIAN PRODUCER

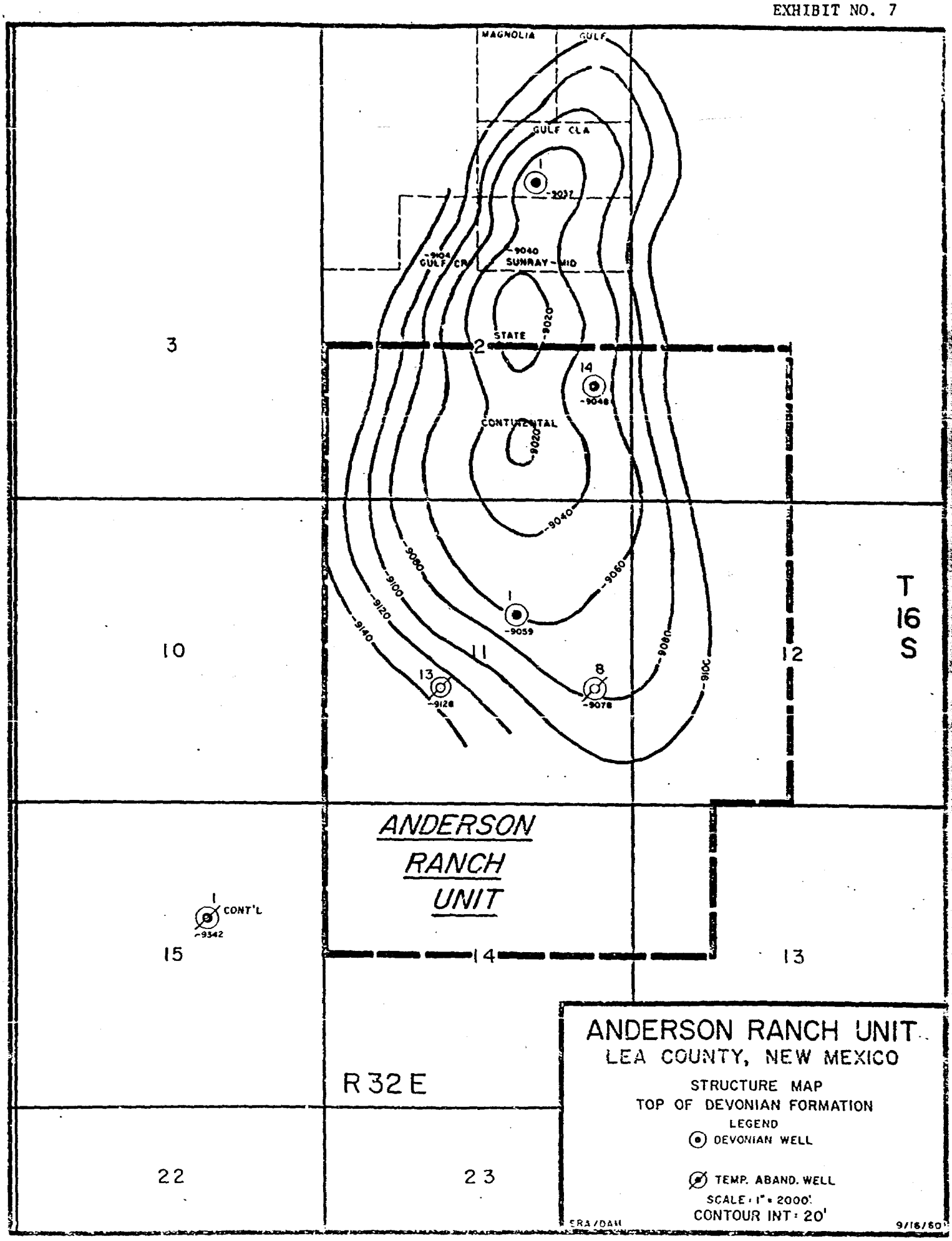
CONTINENTAL OIL COMPANY
PRODUCTION DEPARTMENT — HOBBS DIVISION

ANDERSON RANCH UNIT
LEA COUNTY, NEW MEXICO
STRUCTURE MAP
TOP OF SAUNDERS LIMESTONE
WOLFCAMP FORMATION
CONTOUR INT: 20'

SCALE
0' 1000' 2000'

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 6
CASE NO. 6727

EXHIBIT NO. 7



BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco-Lac EXHIBIT NO. 7
CASE NO. 6727

EXHIBIT NO. 8

NALCO

ANALYTICAL SERVICE LABORATORY REPORT

WATER ANALYSIS

Company: CONOCO OIL COMPANY
HOBBS, NEW MEXICO
DIST. 6-5

Date Printed 30-Jun-77
Analysis No. 77V1259,B
Date Sampled 5-25-77
Date Received 6-20-77

Sample Marked: ARU DISPOSAL DEV & WC

WATER ANALYSIS

DISSOLVED SOLIDS CATIONS	mg/l	meq/l	RESULTS AS COMPOUNDS	mg/l
Sodium,Na(calc.)	20200.	877.		
Calcium,Ca	1520.	76.0	as CaCO3	3800.
Magnesium,Mg	389.	32.0	as CaCO3	1600.
Barium,Ba	.0	.0	as BaSO4	.0
Sum of Cations	22100.	985.		
ANIONS				
Chloride,Cl	33400.	940.	as NaCl	55000.
Sulfate,SO4	1690.	35.2	as Na2SO4	2500.
Carbonate,CO3			as CaCO3	
Bicarbonate,HCO3	590.	9.7	as CaCO3	484.
Sum of Anions	35700.	985.		
TDS CALCULATED	57800.			
Total Iron,Fe	1.5	.1	as Fe	1.5
Acid to Phen,CO2	24.6	.6	as CaCO3	56.0

OTHER PROPERTIES		CaCO3 STABILITY (Index)		CaSO4 SOLUBILITY (meq/l)
pH (units)	6.8	-.2	@ 70F	-33.5
Spec Gravity	1.030	.5	@120F	-33.4
Turbidity (jtu)	1.6	1.2	@170F	-30.5

Remarks:

3 E. G. QUINN
M. G. HARKER

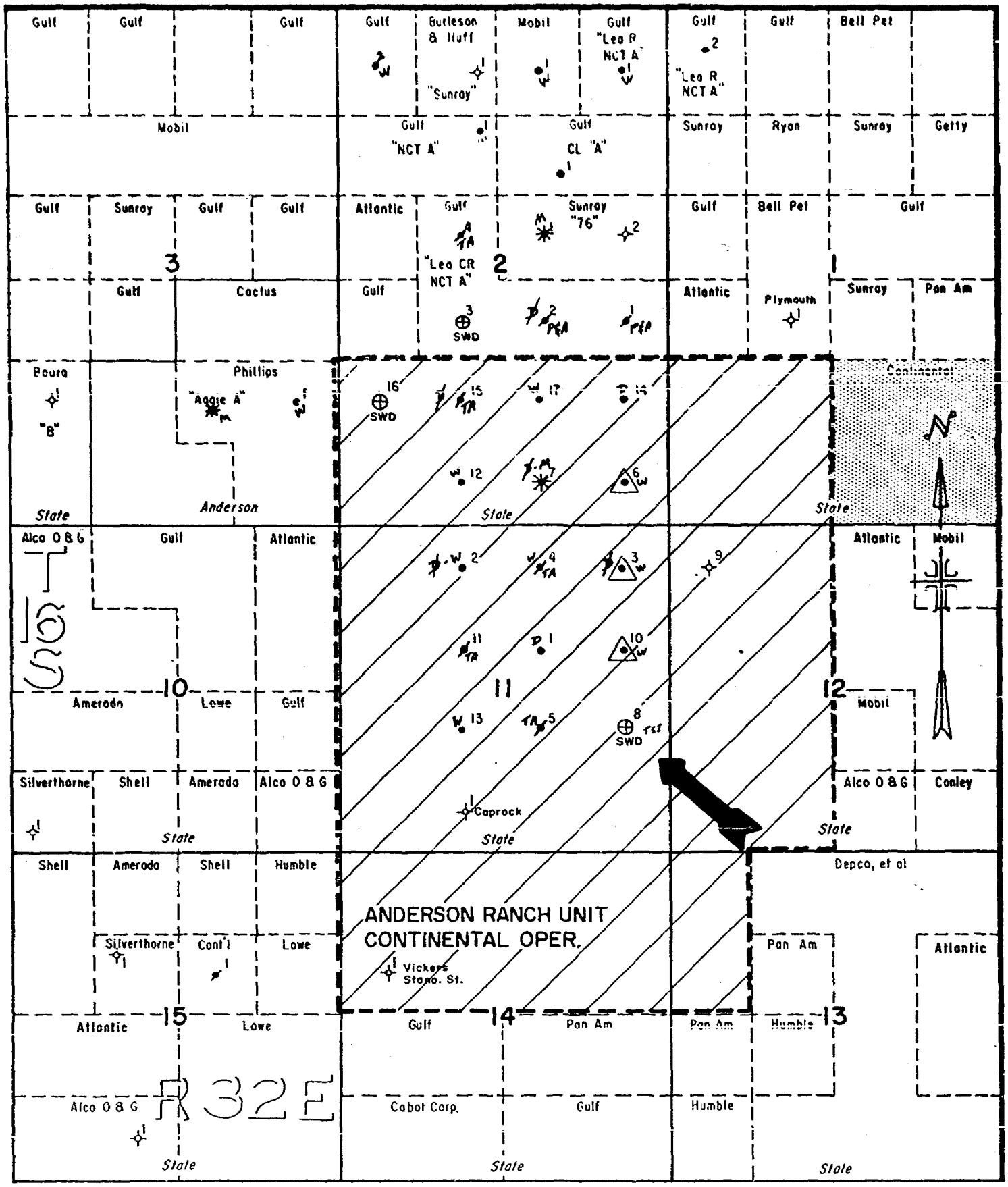
P. O. BOX 87 • SUGAR LAND, TEXAS 77478

NALCO CHEMICAL COMPANY
REGIONAL ANALYTICAL LABORATORIES

2111 E. Dominguez St. Carson, CA 90745
6216 W. 66th Place Chicago, Illinois 60638
Box 16A Paulsboro, NJ 08066
Box 87 Sugar Land, TX 77478

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 8
CASE NO. 6727

EXHIBIT NO. 1



W - Wolfcamp
M - Morrow
D - Devonian
Ø - Penetrated Devonian

CONTINENTAL OIL COMPANY
PRODUCTION DEPARTMENT — HOBBS DIVISION

ANDERSON RANCH UNIT
LEA COUNTY, NEW MEXICO

SCALE
0' 1000' 2000'

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 1
CASE NO. 6727

EXHIBIT NO. 2

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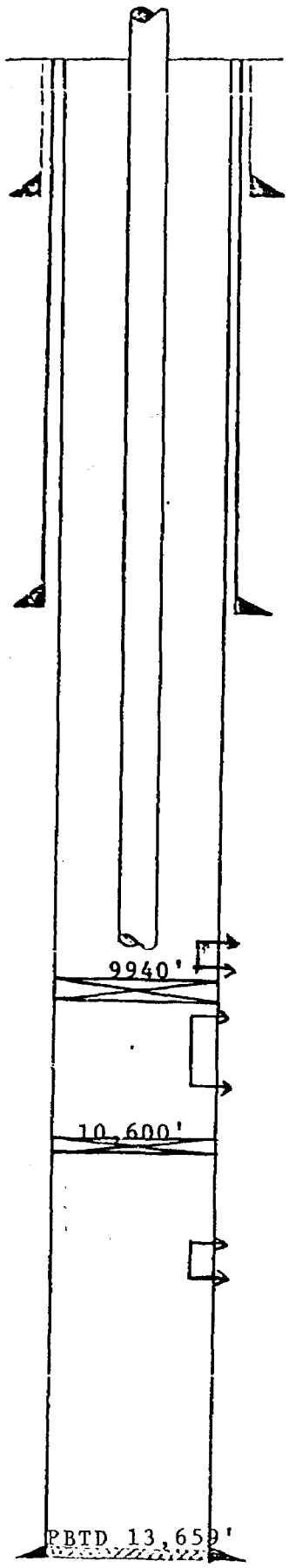
BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Consocdinc EXHIBIT NO. 2
CASE NO. 6727

EXHIBIT NO. 3

ANDERSON RANCH UNIT #8
1980' FSL & 660' FEL Sec 11-165-32 E



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2 7/8" Tubing at 9909'.

9776'

9816' Wolfcamp interval 9776'-10,333'

Cement Retainer at 9940'

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Perforated at 9970'-9975'; 10,015'- 10,025'; 10,050'-10,060'; 10,090'-10,100'; 10,325'- 10,333'.

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12,528' 12,528'-12,545'; 12,574'-12,588'

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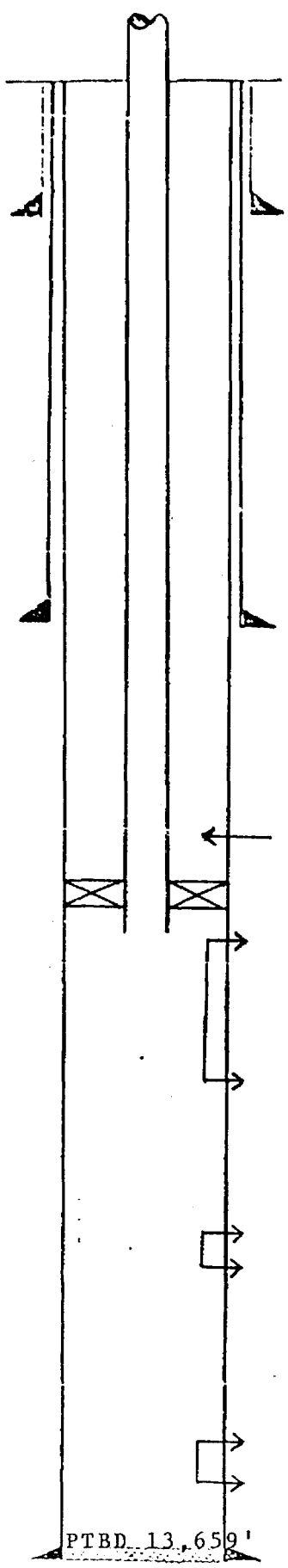
5 1/2" 17#, 20#, 23# Casing set at 13,688'. TOC at 7460'.

PRESENT

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 3
CASE NO. 6727

EXHIBIT NO. 4

ANDERSON RANCH UNIT #8
1980' FSL & 660' FEL Sec 11-165-32 E



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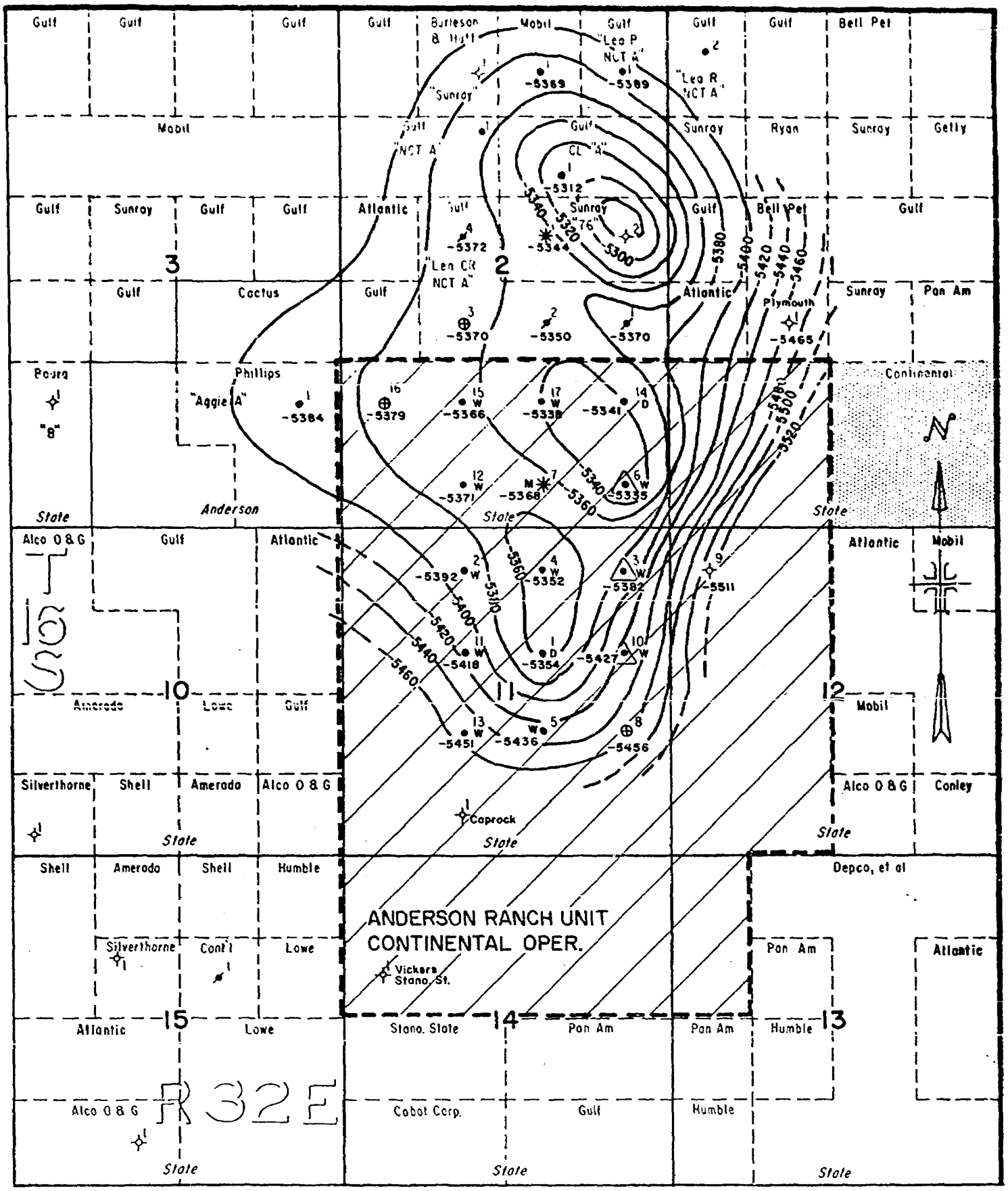
PROPOSED

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco, Inc. EXHIBIT NO. 4
CASE NO. 6727

EXHIBIT NO. 6

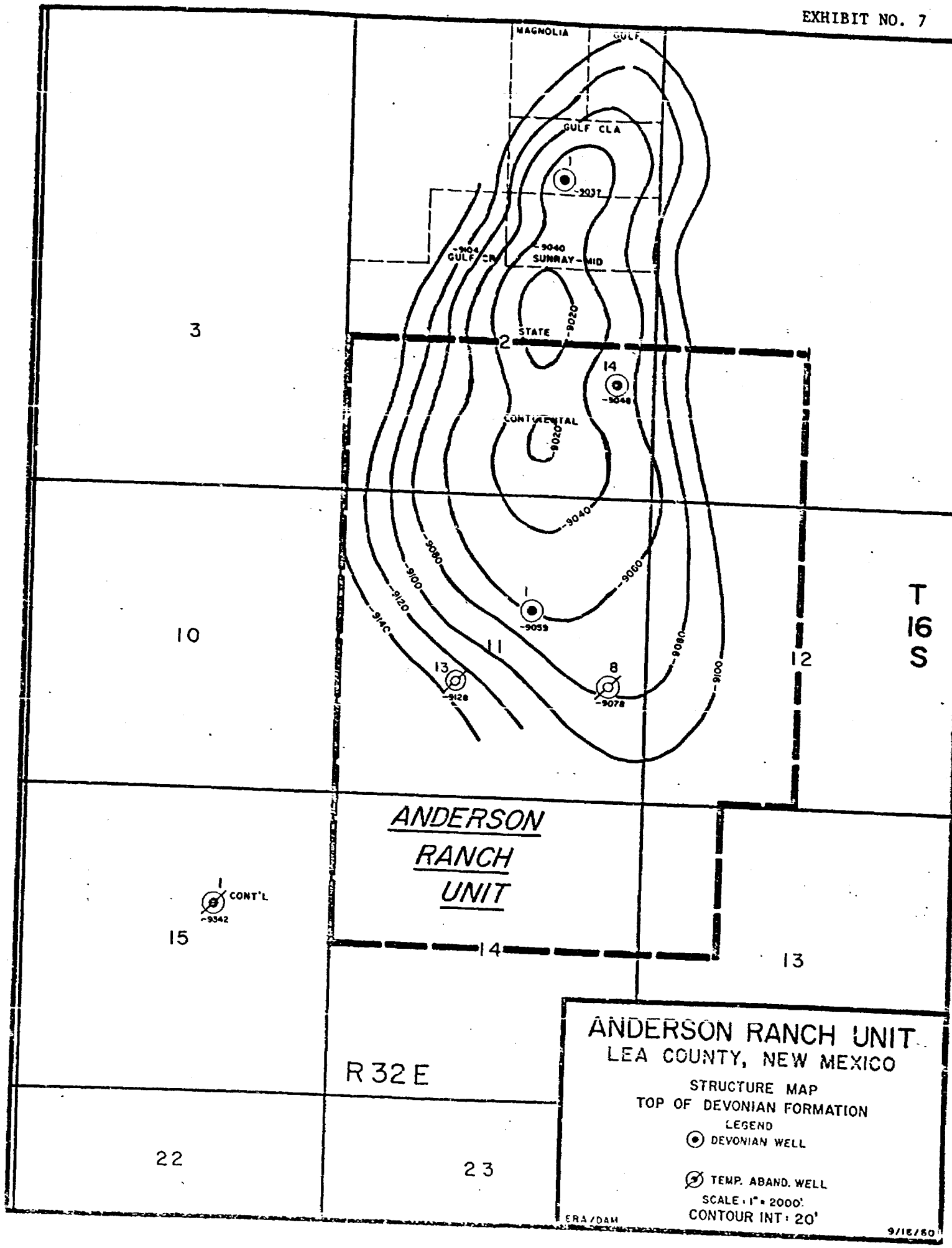


W-WOLFCAMP PRODUCER
D-DEVONIAN PRODUCER

CONTINENTAL OIL COMPANY
PRODUCTION DEPARTMENT — HOBBS DIVISION
ANDERSON RANCH UNIT
LEA COUNTY, NEW MEXICO
STRUCTURE MAP
TOP OF SAUNDERS LIMESTONE
WOLFCAMP FORMATION
CONTOUR INT: 20'
SCALE 0' 1000 ' 2000'

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 6
CASE NO. 4727

EXHIBIT NO. 7



BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 7
CASE NO. 6727

EXHIBIT NO. 8

NALCO

ANALYTICAL SERVICE LABORATORY REPORT

WATER ANALYSIS

Company: CONOCO OIL COMPANY
HOBBS, NEW MEXICO
DIST. 6-5

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Sample Marked: ARU DISPOSAL DEV & WC

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Spec Gravity	1.030	.5	@120F	-33.4
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Remarks:

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M. G. HARKER

P. O. BOX 87 • SUGAR LAND, TEXAS 77478

NALCO trademarks of Nalco Chemical Company.

NALCO CHEMICAL COMPANY
REGIONAL ANALYTICAL LABORATORIES

2111 E. Dominguez St.
Carson, CA 90745

6216 W. 66th Place
Chicago, Illinois 60638

Box 16A
Paulsboro, NJ 08066

Box 87
Sugar Land, TX 77478

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Conoco Inc. EXHIBIT NO. 8
CASE NO. 6227

CASE 6721: Application of Aminoil USA, Inc. for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the N/2 of Section 10, Township 24 South, Range 28 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. 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 6684: (Continued from October 31, 1979, Examiner Hearing)

Application of CO_2-In-Action, Inc. for creation of a new carbon dioxide gas pool and special pool rules, Harding County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the North Bueyeros-Santa Rosa CO_2 Gas Pool and the promulgation of special pool rules therefor, including a provision for 40-acre spacing and proration units. Said pool would comprise all or parts of Sections 1 thru 4, Township 20 North, Range 30 East, and Sections 8, 9, 10, 15, 16, 17, 20, 21, 22, 27, 28, 32, 33 and 34, Township 21 North, Range 30 East.

CASE 6722: Application of Lloyd Davidson for an unorthodox oil well location, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of his Santa Fe Pacific Well No. 1, a Gallup-Entrada-Dakota test 960 feet from the South line and 1230 feet from the East line of Section 29, Township 16 North, Range 6 West, the SE/4 SE/4 of said Section 29 to be dedicated to the well.

CASE 6723: Application of Merrion & Bayless for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pictured Cliffs formation underlying the SW/4 of Section 27, Township 24 North, Range 2 West, South Blanco-Pictured Cliffs Pool, 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 6713: (Continued from October 31, 1979, Examiner Hearing)

Application of Depco Inc. for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the White Ranch Unit Area, comprising 18,962 acres, more or less, of State, Federal, and fee lands in Townships 12 and 13 South, Ranges 29 and 30 East.

CASE 6724: Application of Coquina Oil Corporation for a non-standard gas proration unit and an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 660 feet from the South line and 1650 feet from the East line of Section 7, Township 19 South, Range 32 East, Lusk-Morrow Gas Pool, the S/2 of said Section 7 to be dedicated to the well as a non-standard 320-acre proration unit.

CASE 6725: Application of Tenneco Oil Company for three non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 291.23-acre non-standard gas proration unit comprising the W/2 of Section 6 and the NW/4 of Section 7, a 347.58-acre unit comprising the W/2 of Section 19 and the NW/4 of Section 30, and a 375.17-acre unit comprising the SW/4 of Section 30 and the W/2 of Section 31, all in Township 29 North, Range 8 West, Basin-Dakota Pool, each unit to be dedicated to a well to be drilled at a standard location thereon.

CASE 6726: Application of Tesoro Petroleum Corporation for a waterflood project, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the South Hospah-Upper Sand Oil Pool by the injection of water into the Upper Hospah Sands through three wells located in Units E and M of Section 5 and Unit I of Section 8, Township 17 North, Range 8 West. Applicant further seeks an administrative procedure for expansion of said project.

CASE 6727: Application of Conoco Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in its Anderson Ranch Unit Well No. 8 located in Unit I of Section 11, Township 16 South, Range 32 East, Anderson Ranch Field. Applicant would dispose into the Wolfcamp, Mississippian, and Devonian formations in the overall interval from 9775 feet to 13,620 feet through selective perforations.

CASE 6728: Application of Conoco Inc. for pressure maintenance expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the expansion of its Scarborough Eaves PM Project by the conversion of its Eaves "A" Well No. 7 located in Unit J of Section 19, Township 26 South, Range 37 East, to water injection in the Yates Seven Rivers formations.

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

IN THE MATTER OF THE APPLICATION OF CONOCO INC., FOR APPROVAL TO CONVERT ITS ANDERSON RANCH UNIT WELL NO. 8 FROM SHUT-IN SALT WATER DISPOSAL WELL IN ANDERSON RANCH WOLFCAMP POOL TO SALT WATER DISPOSAL WELL IN ANDERSON RANCH WOLFCAMP, ANDERSON RANCH MORROW GAS AND ANDERSON RANCH DEVONIAN POOLS, LOCATED IN UNIT I, SECTION 11, T-16S, R-32E, LEA COUNTY, NEW MEXICO

Case 6727

A P P L I C A T I O N

Applicant, CONOCO INC., respectfully requests authority to convert from a shut-in salt water disposal well in the Anderson Ranch Wolfcamp Pool to an active salt water disposal well in the Anderson Ranch Wolfcamp, Anderson Ranch Morrow Gas, and Anderson Ranch Devonian Pools, its Anderson Ranch Unit Well No. 8, located 1980' FSL and 660' FEL of Section 11, T-16S, R-32E, Lea County, New Mexico, and in support thereof will show:

1. Applicant is operator and co-owner of the Anderson Ranch Unit consisting of SW/4 Section 1, S/2 Section 2, all Section 11, W/2 Section 12, W/2 NW/4 Section 13, and N/2 Section 14, T-16S, R-32E, Lea County, New Mexico.

2. Applicant wishes to dispose of produced water from the Anderson Ranch Unit into Anderson Ranch Unit Well No. 8, which has been shut-in since November 1969.

3. That heretofore, surplus produced water from the Anderson Ranch Unit has been disposed of into Well No. 16, and that due to mechanical problems in Well No. 16, it is no longer fit for disposal purposes.

4. That the proposed conversion is in the best interest of conservation prevention of waste.

5. That granting this application will not impair correlative rights of any party.

WHEREFORE, applicant respectfully requests this application be set for hearing before the Division's duly appointed Examiner and, upon hearing an order be entered authorizing the conversion of the Anderson Ranch Unit

R 2078
SW disposal

Application
Anderson Ranch Well No. 8
October 19, 1979

Well No. 8 to salt water disposal well in Anderson Ranch Wolfcamp, Anderson Ranch Morrow Gas and Anderson Ranch Devonian pools.

Respectfully submitted,

CONOCO INC.

By John R. Kemp
JOHN R. KEMP
Assistant Division Manager
of Production
Hobbs Division

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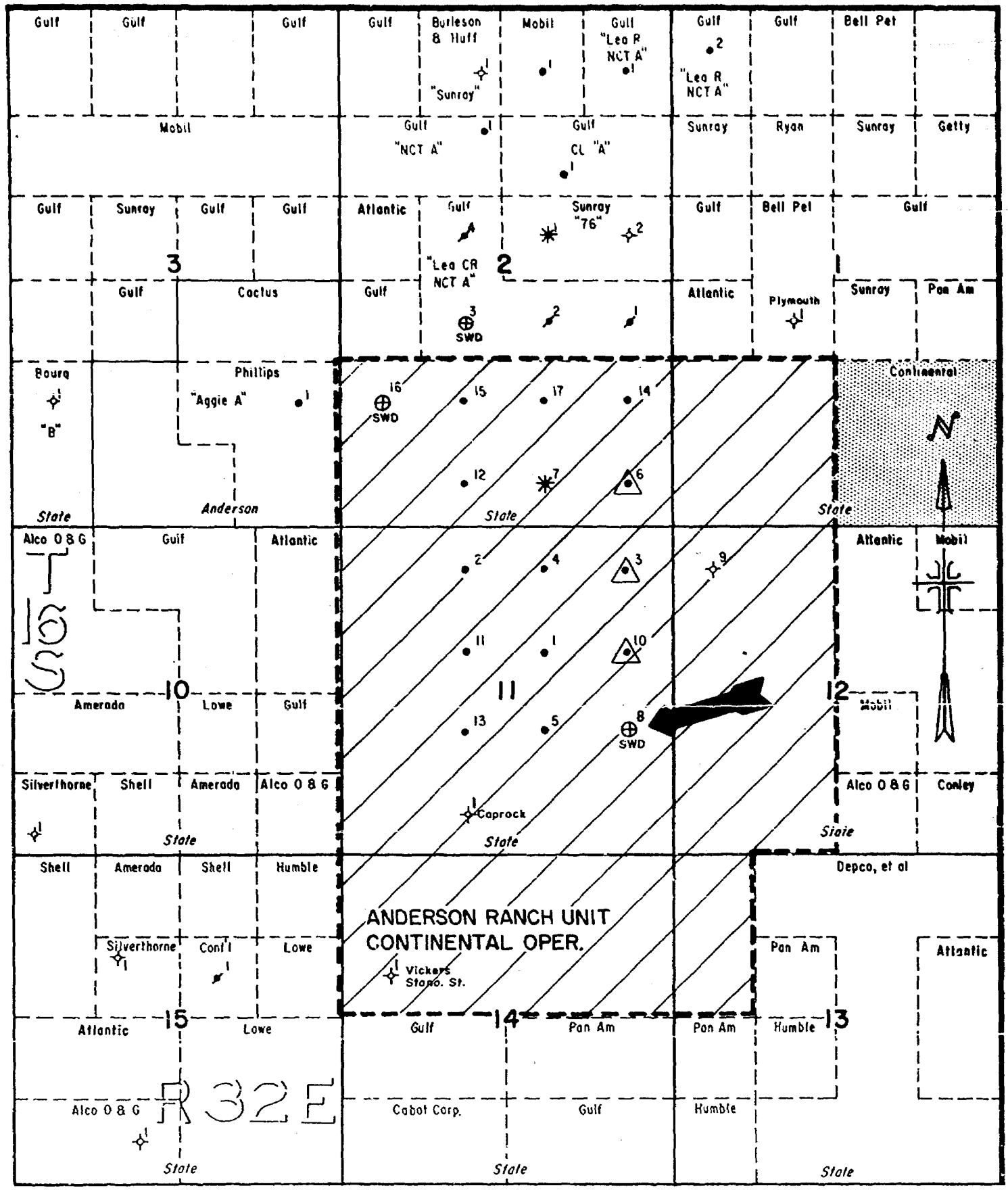

CONTINENTAL OIL COMPANY

PRODUCTION DEPARTMENT — HOBBS DIVISION

ANDERSON RANCH UNIT

LEA COUNTY, NEW MEXICO

SCALE

0' 1000' 2000'

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

IN THE MATTER OF THE APPLICATION OF CONOCO INC., FOR APPROVAL TO CONVERT ITS ANDERSON RANCH UNIT WELL NO. 8 FROM SHUT-IN SALT WATER DISPOSAL WELL IN ANDERSON RANCH WOLFCAMP POOL TO SALT WATER DISPOSAL WELL IN ANDERSON RANCH WOLFCAMP, ANDERSON RANCH MORROW GAS AND ANDERSON RANCH DEVONIAN POOLS, LOCATED IN UNIT I, SECTION 11, T-16S, R-32E, LEA COUNTY, NEW MEXICO

Case 6727

APPLICATION

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2. Applicant wishes to dispose of produced water from the Anderson Ranch Unit into Anderson Ranch Unit Well No. 8, which has been shut-in since November 1969.

3. That heretofore, surplus produced water from the Anderson Ranch Unit has been disposed of into Well No. 16, and that due to mechanical problems in Well No. 16, it is no longer fit for disposal purposes.

4. That the proposed conversion is in the best interest of conservation prevention of waste.

5. That granting this application will not impair correlative rights of any party.

WHEREFORE, applicant respectfully requests this application be set for hearing before the Division's duly appointed Examiner and, upon hearing an order be entered authorizing the conversion of the Anderson Ranch Unit

Application
Anderson Ranch Well No. 8
October 19, 1979

Well No. 8 to salt water disposal well in Anderson Ranch Wolfcamp, Anderson Ranch Morrow Gas and Anderson Ranch Devonian pools.

Respectfully submitted,

CONOCO INC.

By John L Kemp
JOHN R. KEMP
Assistant Division Manager
of Production
Hobbs Division

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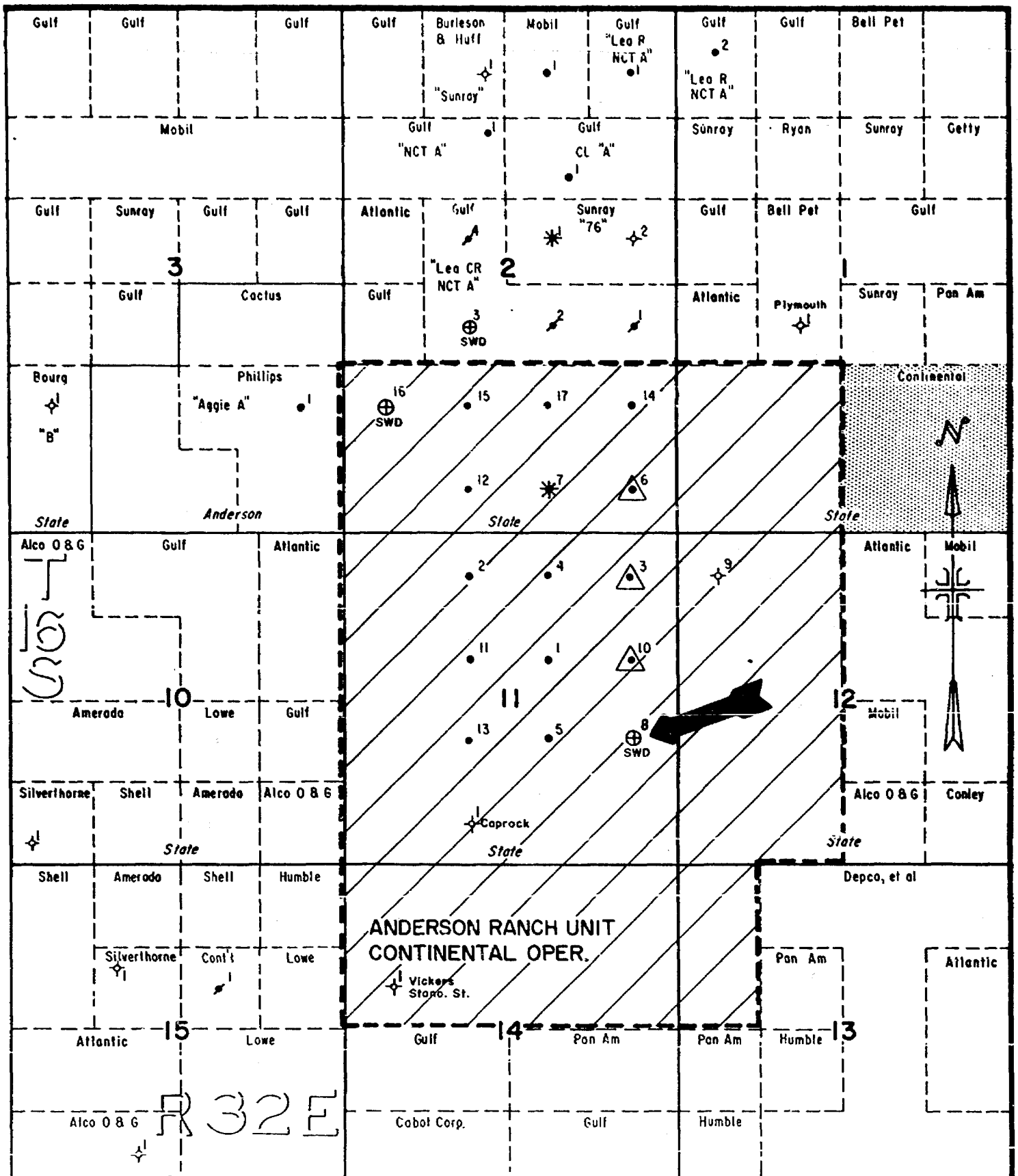

CONTINENTAL OIL COMPANY

PRODUCTION DEPARTMENT — HOBBS Division

ANDERSON RANCH UNIT

LEA COUNTY, NEW MEXICO

SCALE

0' 1000' 2000'

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

IN THE MATTER OF THE APPLICATION OF CONOCO INC., FOR APPROVAL TO CONVERT ITS ANDERSON RANCH UNIT WELL NO. 8 FROM SHUT-IN SALT WATER DISPOSAL WELL IN ANDERSON RANCH WOLFCAMP POOL TO SALT WATER DISPOSAL WELL IN ANDERSON RANCH WOLFCAMP, ANDERSON RANCH MORROW GAS AND ANDERSON RANCH DEVONIAN POOLS, LOCATED IN UNIT I, SECTION 11, T-16S, R-32E, LEA COUNTY, NEW MEXICO

Case 6727

A P P L I C A T I O N

Applicant, CONOCO INC., respectfully requests authority to convert from a shut-in salt water disposal well in the Anderson Ranch Wolfcamp Pool to an active salt water disposal well in the Anderson Ranch Wolfcamp, Anderson Ranch Morrow Gas, and Anderson Ranch Devonian Pools, its Anderson Ranch Unit Well No. 8, located 1980' FSL and 660' FEL of Section 11, T-16S, R-32E, Lea County, New Mexico, and in support thereof will show:

1. Applicant is operator and co-owner of the Anderson Ranch Unit consisting of SW/4 Section 1, S/2 Section 2, all Section 11, W/2 Section 12, W/2 NW/4 Section 13, and N/2 Section 14, T-16S, R-32E, Lea County, New Mexico.

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WHEREFORE, applicant respectfully requests this application be set for hearing before the Division's duly appointed Examiner and, upon hearing an order be entered authorizing the conversion of the Anderson Ranch Unit

Application
Anderson Ranch Well No. 8
October 19, 1979

Well No. 8 to salt water disposal well in Anderson Ranch Wolfcamp, Anderson Ranch Morrow Gas and Anderson Ranch Devonian pools.

Respectfully submitted,

CONOCO INC.

By John L Kemp
JOHN R. KEMP
Assistant Division Manager
of Production
Hobbs Division

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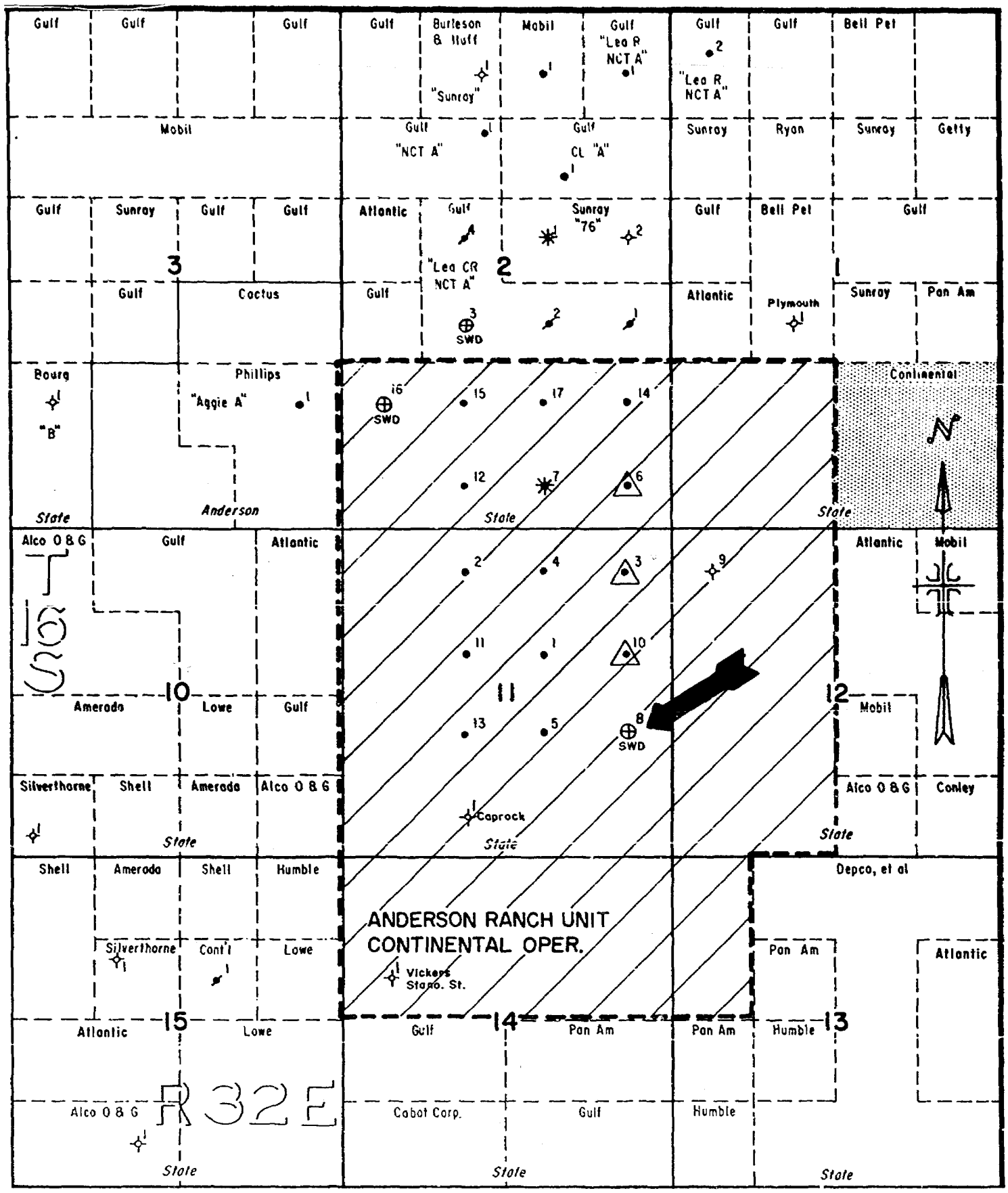

CONTINENTAL OIL COMPANY

PRODUCTION DEPARTMENT — HOBBS DIVISION

ANDERSON RANCH UNIT

LEA COUNTY, NEW MEXICO

SCALE

0' 1000' 2000'

ROUGH

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

Please Expedite - Dev. wells are SI

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

CASE NO. 6727

Order No. R- ~~6196~~ 6195

APPLICATION OF CONOCO INC. FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 14, 19 79, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of November, 19 79, 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, Conoco Inc., is the owner and operator of the Anderson Ranch Unit Well No. 8, located in Unit I of Section 11, Township 16 South, Range 32 East, NMPM, Anderson Ranch Field, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Wolfcamp, Mississippian and Devonian formations, with injection into the overall interval from approximately 9776 feet to 13,620 feet.

(4) That the injection should be accomplished through 2 7/8-inch plastic lined tubing installed in a packer set at approximately 9700 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge or approved leak detection device should be attached to the annulus in order

to determine leakage in the casing, tubing, or packer.

(5) That the injection well or system should be equipped with a ~~pop-off valve~~ pressure limiting switch or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 1995 psi.

(6) That the operator should notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(7) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(8) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Conoco Inc., is hereby authorized to utilize its Anderson Ranch Unit Well No. 8, located in Unit I of Section 11, Township 16 South, Range 32 East, NMPM, Anderson Ranch Field, Lea County, New Mexico, to dispose of produced salt water into the Wolfcamp, Mississippian, and Devonian formations; injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 9700 feet, with injection into the overall interval from approximately 9,776 feet to 13,620 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus

or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) That the injection well or system shall be equipped with a ~~pop-off valve~~ pressure limiting switch or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 1175 psi.

(3) That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(4) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(5) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Division Rules and Regulations.

(6) 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.