

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

May 6, 1991

Conoco Inc.
10 Desta Drive West
Midland Texas 79705-4514

Attention: Jerry Hoover

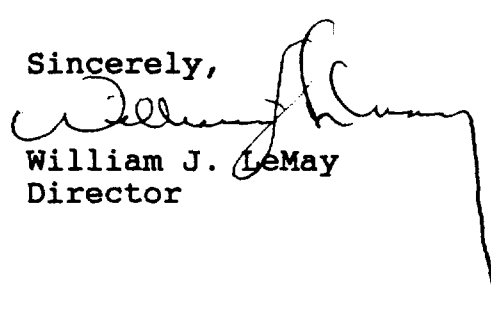
Re: Amendment of Division Order No. R-5250

Dear Mr. Hoover:

Reference is made to your request dated April 2, 1991 to amend Division Order No. R-5250, which order authorized the use of the King Well No. 1, located in Unit C of Section 9, Township 20 South, Range 25 East, NMPM, Eddy County, New Mexico, as a Devonian disposal well, injection to occur from a depth of approximately 10,300 feet to 10,550 feet. It is our understanding that the subject order limited the surface injection pressure to no more than 360 psi, and, that you now wish to amend the order to provide for a surface injection pressure limitation of 2,058 psi in accordance with current Division guidelines. It is further our understanding that the packer in the subject well has been set at a depth of 9,963 feet.

You are hereby authorized to inject into the subject well at a surface injection pressure not to exceed 2,058 psi.

Sincerely,


William J. LeMay
Director

xc: OCD-Artesia
Case File-5708
D. Catanach
Rick Brown



Midland Division
Exploration and Production

Conoco Inc.
10 Desta Drive West
Midland, TX 79705-4514
(915) 686-5400

April 2, 1991

Mr. David Catanach
P.O. Box 2088
Sante Fe, NM 87504

Dear Mr. Catanach:

**APPLICATION FOR AMENDMENT OF THE KING NO. 1 SWD WELL,
LOCATED 660' FNL & 1980' FWL, SEC. 9, T-20S, R-25E,
INJECTION ORDER NO. R-5250 TO RESTRICT THE SURFACE
INJECTION PRESSURE TO .2 PSI/FOOT OF DEPTH TO THE TOP
OF THE INJECTION ZONE**

For some unexplainable reason the original injection order restricted the surface injection pressure to 360 psig. I recently called Mike Williams requesting some temporary relief from this pressure restriction while we shut-in our other Dagger Draw disposal well to clean it out and replace the tubing. At that time we will need to dispose of all Dagger Draw water (about 8,000 BWPD) in the King well for about a week. His opinion was that the order should have originally been written for .2 psi/foot to the top of the injection interval which is the beginning of the open hole section at 10,290'.

It was also strange that the order allowed the injection packer to be set at 1800'. This order was issued to Roger Hanks, the operator of this well at that time. After Conoco purchased this property, the injection packer was moved downhole, near the top of the injection zone.

Recent discussions with Mike Williams in Artesia, concerning the injection order for this SWD well revealed that their files did not reflect the moving of the injection packer from 1800' (as set by former operator, Roger Hanks) to the current 9963'. To update everyone's files on the King No. 1 SWD well, the enclosed belated BLM subsequent report is being filed with three attachments verifying that the packer in this well was moved to 9,963 feet on March 9, 1981. An updated well schematic and well data sheet are included in addition to a copy of the daily drilling report which documented the work that was done.

Mike said that he talked to you about this order and that you agreed to amend it to include the standard .2 psi/foot of depth pressure limit. I have also attached a copy of Order No. R-5250 for your convenience.

The King well currently injects about 3,000 BWPD on a vacuum. In 1984 a step rate test (which was not submitted) was run on this well. The test was conducted to a maximum rate of 13,100 BWPD and a maximum pressure of 3750 psi without experiencing a break-over. It is assumed that this was the highest water pump rate that was available for the test and it was aborted at this point. I have included a copy of this test data for your information.

We will appreciate your expediate handling of this application.

Very truly yours,

Jerry W. Hoover
Regulatory Coordinator

JWH/tm

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.

NM 0147580

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other

Salt Water Disposal

2. Name of Operator

Conoco Inc.

3. Address and Telephone No.

10 Desta Drive, Suite 100W, Midland, TX 79705 915-686-6548

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

660' FNL & 1980' FWL
Sec. 9, T-20S, R-25E

7. If Unit or CA, Agreement Designation

8. Well Name and No.

King SWD No. 1

9. API Well No.

300152025700

10. Field and Pool, or Exploratory Area

Devonian

11. County or Parish, State

Eddy, NM

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other Moved packer
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

On March 9-14, 1981 the following work was performed on this well:

1. Milled over the packer set at 1800' by the former operator, Roger Hanks.
2. Cleaned out hole with bit and casing scraper to 10,050'.
3. Went in hole with Baker Lok-Set packer and 318 jts. 2-7/8" tubing.
Set packer at 9,963'.
4. Placed well on injection.

14. I hereby certify that the foregoing is true and correct

Signed

Title Regulatory Coordinator

Date 3/29/91

(This space for Federal or State office use)

Approved by

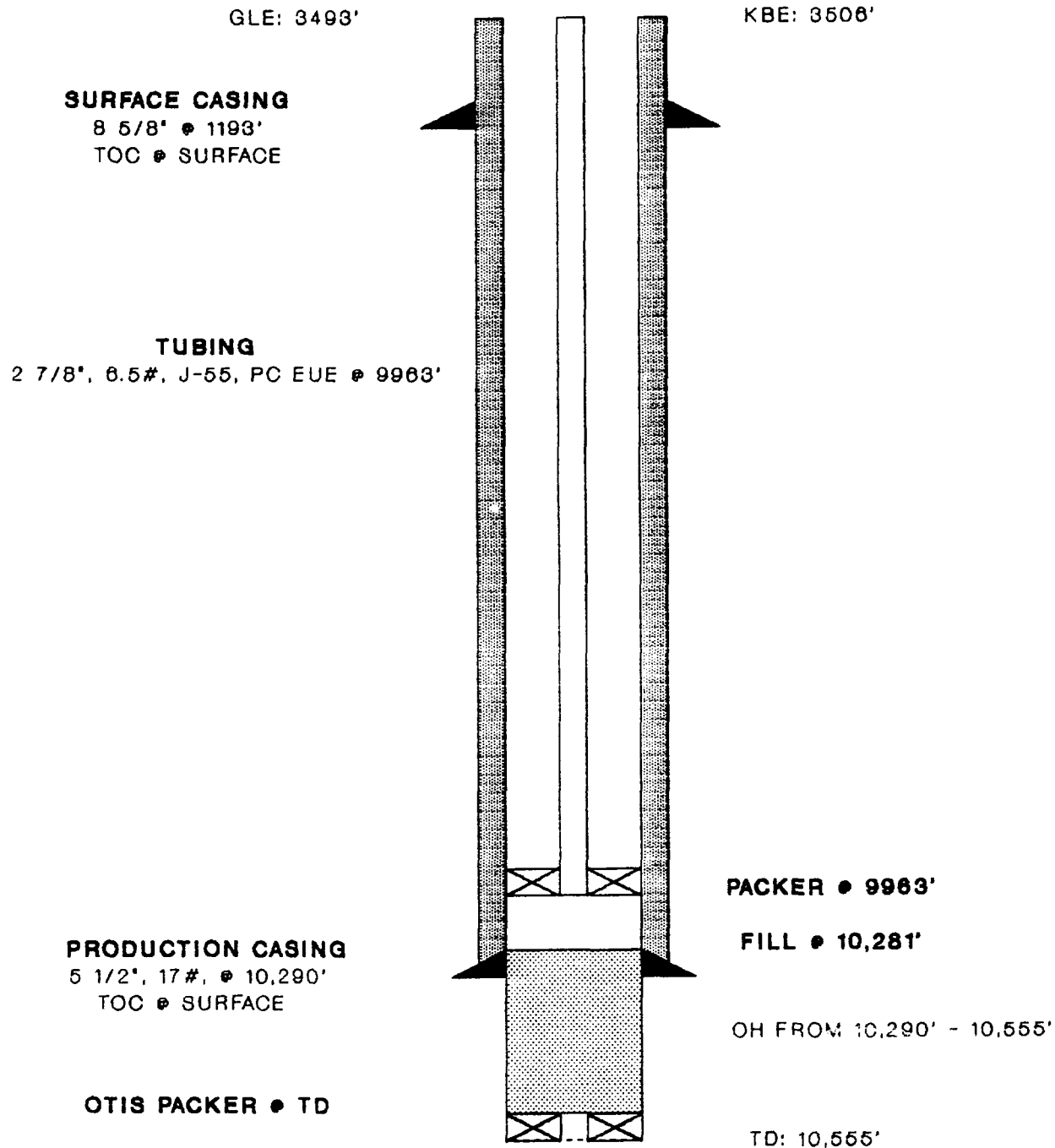
Title

Date

Conditions of approval, if any:

WELLBORE DIAGRAM

KING NO. 1 SWDW



BY: JIM ALLEN

DATE: 01-28-91

WELL DATA SHEET
KING NO. 1 SWD

Well Data:

Location: 660' FNL & 1980' FWL, Section 9, T-20S,
R-25E, Eddy County, New Mexico

Elevation: 3493' GL 3506' KB Zero @ KB

TD: 10,555' PBD: 10,555'

Casing: Surface: 8-5/8" @ 1193'

Production: 5-1/2" 17 ppf @ 10,290'
TOC: @ Surface

Tubing: 318 joints of 2-7/8" plastic-coated EUE (9963')

Packer: Baker Lok-Set at 9963' set with 10k# compression

OH Interval: 10,290' - 10,555' Devonian

CSG SIZE (IN)	WGT (PPF)	GRD	CPLG	BURST (PSI)	COLL (PSI)	BODY (LBS)	JOINT (LBS)	DRIFT (ID)	BBLS/ FT.	CUFT/ FT.
8-5/8	24	K-55	ST&C	2,950	1370	381,000	263,000	7.972	.0636	.3575
5-1/2	17	K-55	LT&C	5,320	4910	273,000	272,000	4.767	.0232	.1305
2-7/8	6.5	J-55	EUE	7,260	7680	72,580	72,580	2.347	.00579*	.0325*
1-1/4	1.08	CT	NA	11,900	8810	22,260	---	1.08	.00112	.00702

* Tubing is internally plastic-coated

CONTINENTAL OIL COMPANY

TRACTOR	LEASE	WELL NO.	CO.	STATE	N.M.	LANDING FLANGE ELEV. +	FT.	LAST CASING	DEPTH	SIZE	WT	GRADE	DATE
PERM	DBI	1	Eddie			DEPTHS MEASURED FROM DE	RT	RB					
NO.						HEIGHT OF MEASURING POINT							CO SUPERVISOR

3/7/81 MIRU. Prep to Pull tbg. STON

Cost to DATE: \$ 200⁰⁰

9

3/8/81 POOH w/ 3" X LINE Tbg, 59 its 1795', 13' 3 1/2" sub, & Oils w/c seal assembly.
 RTH w/ PKR Pickers, Cullite shoe, 6' washer pipe, 3 D.C.'s. Tag PKR 1833 r/mde
 9' progressu STON

Cost: \$ 5280⁰⁰

3/10/81 Started milling PKs. PKs started spinning. POOH w/1kg - D.C.'s + shoe. RTH w/
 grapple's overshot 3 1/2" ID T Bumpers sub. Could not catch sub. POOH. RTH w/ 3 3/8"
 " w/Bumper sub. Caught fish, but could not get loose. Release
 Fish T POOH w/Bumper sub & overshot. Grapple still on fish. RTH w/ (card).
 shoe T milled up Grapple. STON

Cost 19556⁹⁶

3/11/81 STARTED milling on PKs w/1kg Bottom shoe, very little torque. PKs still spinning. Could not
 move PKs up or down. POOH T Had 4" piece of PKs probe engaged on PKs Pickers.
 RTH of shoe not cutting & was bent and broke. RTH w/ PKs pickers T jugged bottom
 shoe T started milling PKs still spinning. No Progress. STON.

Cost: \$ 12,656

3/12/81 Milled 2 Hrs w/ jugged Bottom shoe. No Progress. POOH with Tools. RTH w/ 1 ft
 wash over pipe dressed w/ Culligan and Bottom. Started milling on PKs. Good action for 4" (had
 lost torque. POOH - cut right w/cut off of wireline pipe. RTH w/ 3 3/8" OS. Bumper sub, jace T 3
 D.C.'s. Caught fish. Could not move PKs up or down. Jugged for 1 Hrs OS. Pulled off at fish
 Could not catch fish again. POOH. Rig up shoe tool. RTH w/ Pump Bumper T

CONTINENTAL OIL COMPANY

INTRACTOR ☒ REPORT

RIG NO. DWA

LEASE King S.W.D.

WELL NO. 1

CO. Eadie

STATE N. M.

DAILY DRILLERS' REPORT

LANDING PLANCE ELEV. 1
 DEPTHS MEASURED FROM DEPTH OF MEASURING POINT FROM LANDING PLANCE
 FT. LAST LAST LAST
 RB RB RB
 SIZE SIZE SIZE
 DATE DATE DATE

3/12/81 (Cont.) Spot 2 SK. Cont. @ 1839'. POOH 1 STON.

Cost to Date: 112,250

3/13/81 CONTINUED w/ 4 1/4" CUBIC SINE 3 D.C.'s. 1 STONE MEASURING 20 PKT. MEAS. w/ PKT. POOH w/ 29.13
 3 1/2 X LINE 1 kg 7 CUBIC SINE. WITH w/ 4 3/4" BIT, 0.9g SAMPLES, 2 D.C.'s. 2 2 1/8" HIG
 to 10,050'. PKT. 1111. I.D. STON.

Cost to Date: 121,500

3/14/81 POOH w/ 1 kg 3 D.C.'s bit + sampler. WITH w/ Baker Lok-set PKT, 318 JTS 2 2/8" per bag.

Set PKT @ 9943 - Remove K.O.H. Tool withdrawn. Place well can. Disposed @ 2000 feet. Rig to
 Reverse Rig.

Cost to Date: 124,500

DATE: Dec. 1981 and 1982

3/15/81 Screen L.P.D. @ 3000 feet

3/16/81 Screen L.P.D. @ 3000 feet FINAL REPORT

BEFORE THE OIL CONSERVATION COMMISSION
THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5708
Order No. R-5250

APPLICATION OF ROGER C. HANKS FOR
SALT WATER DISPOSAL, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 7, 1976, at Santa Fe, New Mexico, before Examiner, Daniel S. Nutter.

NOW, on this 3rd day of August, 1976, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Roger C. Hanks, is the owner and operator of the King Disposal Well No. 1, located in Unit C of Section 9, Township 20 South, Range 25 East, NMPM, Eddy County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Devonian formation, with injection into the open-hole interval from approximately 10,300 feet to 10,550 feet.

(4) That the injection should be accomplished through 3 1/2-inch tubing installed in a packer set at a minimum depth of 1800 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 water disposed of in said well should be chemically treated to prevent corrosion and scale build up, and that coupon tests should be continuously conducted and the results thereof filed semi-annually with the Commission.

(6) That the injection well or system should be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than three hundred-sixty (360) psi, provided however, the Secretary-Director of the Commission should have authority to increase the aforesaid pressure limit if, in his judgement, conditions so warrant.

(7) That the operator should notify the supervisor of the Artesia District Office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected.

(8) 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.

(9) 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, Roger C. Hanks, is hereby authorized to utilize its King Disposal Well No. 1, located in Unit C of Section 9, Township 20 South, Range 25 East, NMPM, Eddy County, New Mexico, to dispose of produced salt water into the Devonian formation, injection to be accomplished through 3 1/2-inch tubing installed in a packer set at a minimum depth of 1800 feet, with injection into the open-hole interval from approximately 10,300 feet to 10,550 feet;

PROVIDED HOWEVER, 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 water disposed of into said well shall be chemically treated to prevent corrosion and scale build-up, and coupon corrosion tests shall be continuously conducted and the results thereof filed semi-annually with the Artesia District Office of the Commission.

(3) That the injection well or system shall be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than three hundred-sixty (360) psi, provided however, the Secretary-Director of the Commission shall have the authority to increase the aforesaid pressure limit upon satisfactory showing that such pressure limit increase is warranted.

(4) That the operator shall notify the supervisor of the Artesia District Office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected.

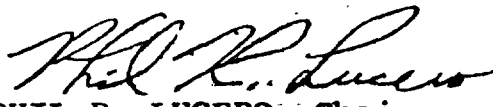
(5) That the operator shall immediately notify the supervisor of the Commission's Artesia District Office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

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

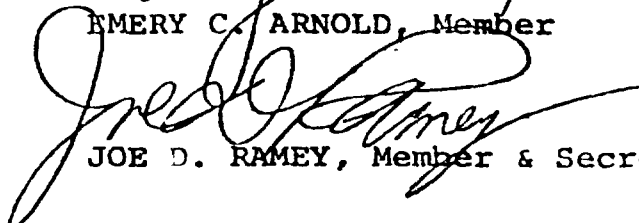
(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


PHIL R. LUCERO, Chairman


EMERY C. ARNOLD, Member


JOE D. RAMEY, Member & Secretary

S E A L

dr/

B & D Well Testers
(505) 393-0119

STEP RATE TEST

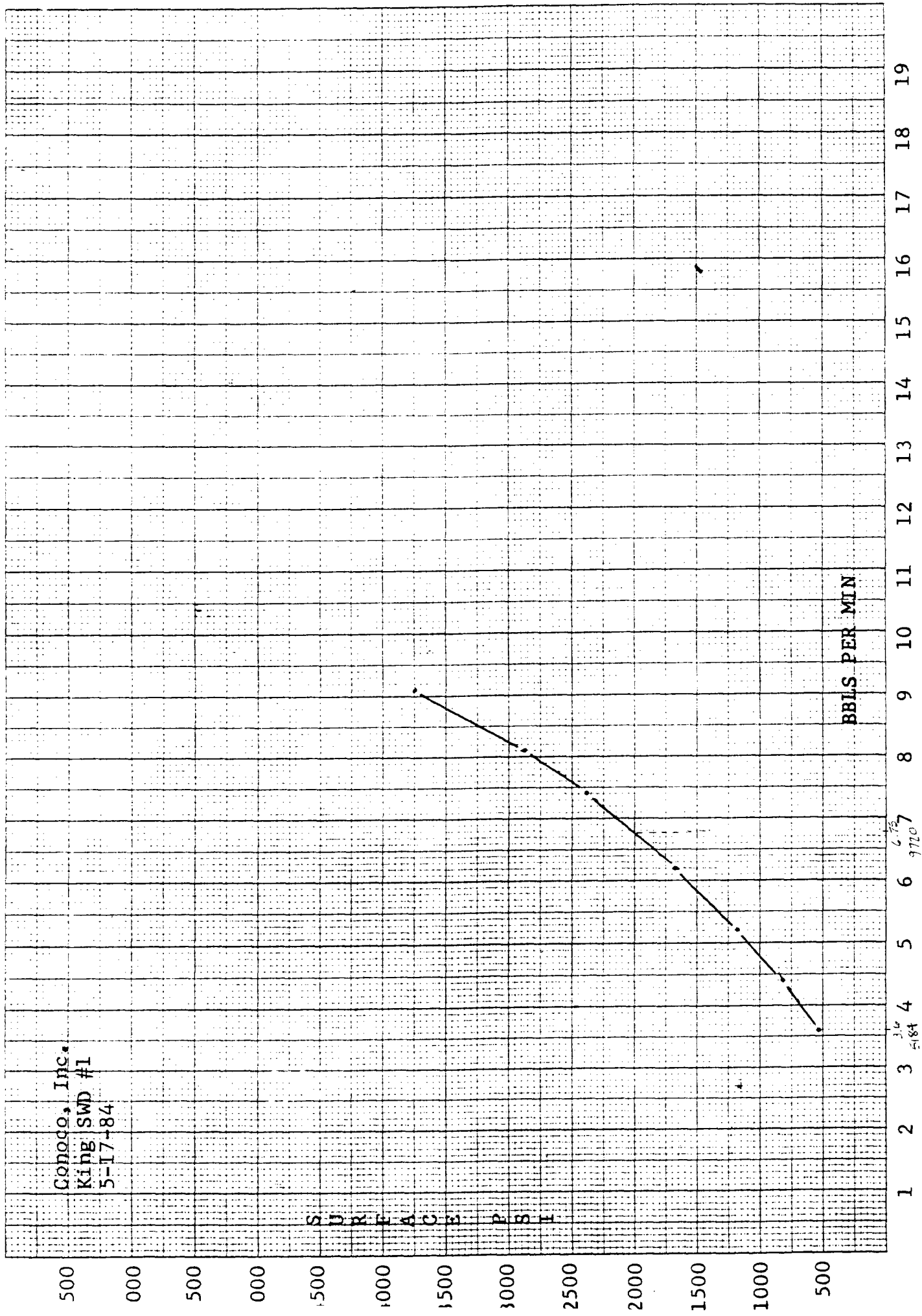
HOBBS,
NEW MEXICO

FIELD DATA SHEET

Type Test:	<input type="checkbox"/> Initial	<input type="checkbox"/> Annual	<input checked="" type="checkbox"/> Special	Test Date	5-17-84	Lease No. or Serial No.	
Company	Conoco, Inc.					Allottee	
Field	Dagger Draw		Reservoir	Devonian		Location	
Completion Date	Total Depth		Plug Back TD	Elevation		Form or Lease Name	
	10,555			3493'		King SWD	
1st Size	5 1/2"	17#	Set At	10,333'	Perforations: From	To	Well No.
							1
2nd Size	2 7/8"		Set At	Open Hole	Perforations: From	10,333'	Sec. 9 Twp - Blk 20 Rge 25
2nd Completion (Describe)	Salt Water Disposal Well					Pecker Set At	Country or Parish
							Eddy
Producing Thru	Reservoir Temp. F		Mean Ground Temp. F		Bore. Press. - P	State	NM

10. REPRESENTATIVE

DATE	ELAP. TIME	well information			surf.	remarks	
Time of Reading	TIME	Rate BPD	Surf. Psig	B.H.P.	psi. cor. Friction	(Include liquid production data: Type - API Gravity - Amount)	
12:40			250	4276		Midway	10,444'
12:45	Start	3.6	250	4276		Fill @ 10,281'	(IN CSS)
12:50		3.6	525	4276		Bombs @ 10,250'	@ 12:45
12:55		3.6	525	4276			
1:00	15	3.6	530	4282			
1:05		4.4	805	4288			
1:10		4.4	810	4288			
1:15	30	4.4	810	4288			
1:20		5.2	1170	4295			
1:25		5.2	1175	4295			
1:30	45	5.2	1180	4295			
1:35		6.0	1620	4321			
1:40		6.0	1620	4321			
1:45	1	6.2	1670	4321			
1:50		7.3	2360	4333			
1:55		7.4	2390	4340			
2:00	15	7.4	2390	4340			
2:05		8.1	2840	4365			
2:10		8.1	2870	4365			
2:15	30	8.1	2870	4365			
2:20		9.0	3740	4391			
2:25		9.1	3750	4391			
2:30	45	9.1	3750	4391		End Test	631.0 BBLS total H ₂ O
2:31			30	4321			
2:32			0	4269			
2:33			vac	4263			
2:34			vac	4263			
2:35			vac	4263			



• Surface Pressure
 ○ Surface Pressure Friction Corrected

Conoco, Inc.
King SWD #1
5-17-84

BOTTOM HOLE PRESSURE

BBL'S PER MIN

5000
4900
4800
4700
4600
4500
4400
4300
4200
4100
4000

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

