



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

GARRY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

R- 9.240

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC \_\_\_\_\_  
DHC \_\_\_\_\_  
NSL \_\_\_\_\_  
NSP \_\_\_\_\_  
SWD \_\_\_\_\_  
WFX \_\_\_\_\_  
PMX X

Gentlemen:

I have examined the application for the:

Gary L. Bennett Caravalcade 21 lease #4-P  
Operator Lease & Well No. Unit S-T-R 21-18-32

and my recommendations are as follows:

New project - require hearing

Yours very truly,

Jerry Sexton  
Jerry Sexton  
Supervisor, District 1

/ed

5-3-90 Gary Bennett called he pursue setting this  
for hearing to create w<sup>5</sup>

**GARY L. BENNETT  
P. O. BOX 16844  
LUBBOCK, TX 79490  
(806) 794-3368**

April 14, 1988

**New Mexico Oil Conservation Commission  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088**

**Re: Application for Pressure Maintenance Well  
NM59044 Cavalcade 21 Lease  
Lea County, New Mexico**

**Gentlemen:**

Gary L. Bennett hereby makes application to convert the Cavalcade Federal 21 No. 4 well situated 400 feet from the south line and 660 feet from the east line (unit letter "P") of Section 21, T-18-S, R-32-E, Lea County, New Mexico from an oil producer to a pressure well. This well is presently shut in due to inability to produce. If approved the well will be used for injection of water produced from the Penrose and Queen formations at a depth interval from about 4000 feet to 4300 feet. As shown on the attached diagrammatic sketch, the injection of produced water will be made into the Penrose formation in the disposal well through 2 3/8ths tubing, unlined, using a Baker, Lok-Set Packer set at 4050', at a depth interval from about 4096 to 4130 feet. Water produced from the Penrose and Queen formations is salty, it is estimated that from 10 to 400 barrels of water per day will be injected into the disposal well. The Cavalcade Federal 21 No. 4 well made small quantities of the same type water from the Penrose formation while it was operated as an oil producer.

The Penrose and Queen formations are of Permian age and are older than the triassic formation. The next higher oil & gas zone is the Queen found at a depth of 3844 feet with the next lower zone being the Grayberg at a depth of 4363 feet. Applicant has no information indicating that a fresh water well exists within one mile of the proposed injection well. The water produced from the Penrose and Queen formations is highly salty and is unfit for domestic stock, irrigation or other general use. The applicant therefore asks for administrative approval of this application without notice and hearing as an exception to Rule 701-A.

Copies of this application have been sent to all offset operators and to the surface owner.

Page 2  
NMOCD 4/14/88

Enclosed are three copies of this application, form C-108, diagrammatic sketch, and a plat of the surrounding area. Copies of the log of the Cavalcade Federal 21 No. 4 well have been previously submitted to the commission.

Respectfully submitted by,



Randall L. Capps  
for Gary L. Bennett

RLC/ksc  
encl.

Copies sent to:

OFF-SETTING OPERATORS

Ingram Oil & Gas, 2828 Diamond Shamrock Tower, Dallas, TX 75225

Breck Operating Corp., POB 911, Breckenridge, TX 76024

Mewbourne Oil Co., 400 W. Illinios, Suite 1270, Midland, TX 79701

Chevron USA Inc. P. O. Box 1150, Midland, TX 79702

SURFACE OWNER

United States of America  
Bureau of Land Management  
POB 1857  
Roswell, NM 88201

## APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no

II. Operator: GARY BENNETT

Address: P. O. Box 16844, Lubbock, TX 79490

Contact party: Gary Bennett Phone: 806-794-3368

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project?  yes  no  
If yes, give the Division order number authorizing the project \_\_\_\_\_.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

\* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

\* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

\* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

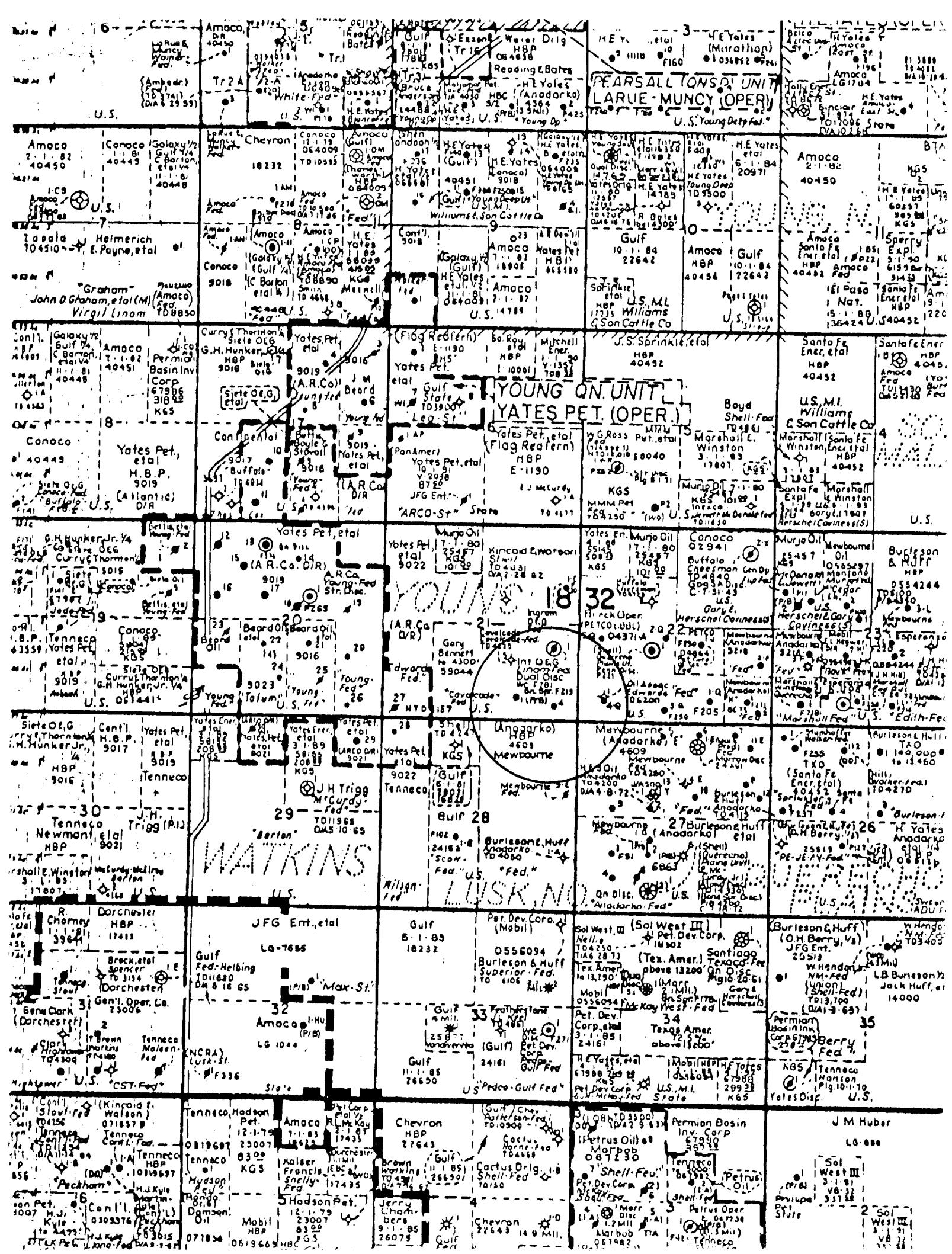
XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Randall L. Capps Title Consultant

Signature: Randall L. Capps Date: 4/14/88

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.



GARY BENNETT  
Cavalcade Fed 21 No. 4  
400' FSL & 660' FEL  
Section 21, T18S, R32E  
Querrecho Plains Queen Associated  
Lea County, New Mexico

### Proposed Pressure Maintenance Well

1. Proposed average daily rate: 10 bwpd  
Proposed Maximum daily rate: 400 bwpd
2. Closed System
3. Proposed average injection pressure: 220lbs psi  
Proposed maximum injection pressure: 1000lbs psi
4. Sources of injected fluid: produced water Penrose and Queen  
Compatibility: will be compatible with proposed injected zone  
both being "Queen Associated".
5. No stimulation proposed, well currently takes fluid on vacum.  
Pump-in tracer shows total and complete isolation of zone.
6. Logs have been previously submitted to NMOCD.

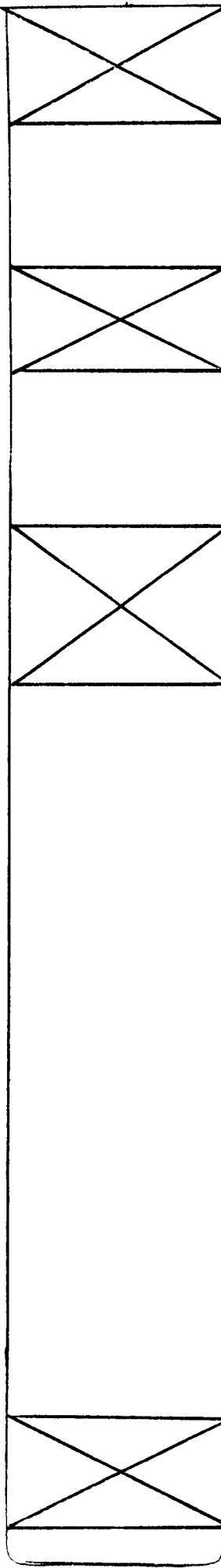
Applicant states that he has examined available geologic and engineering data and finds no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

PLUG # 4 @ surface

PLUG # 3 @ 465'  
25 sx cement-top @ 365'

PLUG # 2 @ 1500'  
90 sx cement-top @ 1150'

PLUG #1 @ 4150'  
40 sx cement-top @ 4000'



TD: 4225'

CAVALCADE OIL CORPORATION  
Fed 21 No. 5 (D&A)  
1650' FSL & 1800' FEL  
Section 21, T18S, R32E  
Querrecho Plains Queen Associated  
Lea County, New Mexico

8-5/8" 23# CSG. set @ 420'  
with 250 sx. cement

Gauge: to be monitored to show no  
communication between tubing and casing

Treated water between casing and tubing

2-3/8" tubing set @ 4040'

Perforations: 4096-4130'

4-1/2" CSG 9.5# @ 4220'  
1160 sx. cement circulated

Baker Packer @ 4040'

Penrose 4088'

GARY BENNETT  
Cavalcade Fed 21 No. 4  
400' FSL & 660' FEL  
Section 21, T18S, R32E  
Querrecho Plains Queen Associated  
Lea County, New Mexico

TD: 4225'

GARY BENNETT  
Cavalcade Fed 21 No. 4  
400' FSL & 660' FEL  
Section 21, T18S, R32E  
Querrecho Plains Queen Associated  
Lea County, New Mexico

**Proposed Pressure Maintenance well**

**Geological Data on Injection Zone:**

The zone to be injected is the Penrose formation encountered at 4088 feet to 4130 feet in the subject well, being approximately 42 feet in thickness. The Penrose is a sandstone, light grey, white, red, very fine to fine grained, consolidated, subrounded to subangular, some unconsolidated very fine, grained, friable, traces of coarse large dolomite, very dolomitic, very anhydrite. There is no known source of drinking water underlying the proposed injected interval.

See attached for data on all wells within area of Review:

UNITED STATES GOVERNMENT DUPLICATED  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

GSA GEN. REG. NO. 100-0137  
Expires August 31, 1985

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1. TYPE OF WELL OIL  GAS  DRY  Other 

2. TYPE OF COMPLETION

NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEPEN <input type="checkbox"/>	DRILL BACK <input type="checkbox"/>	DRILL FASTER <input type="checkbox"/>	Other <input type="checkbox"/>
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3. NAME OF OPERATOR

Cavalcade Oil Corporation

4. ADDRESS OF OPERATOR

P. O. Box 16187, Lubbock, TX 79490

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 400' FSL &amp; 660' PEL

At top prod interval reported below

At total depth

Same

14. PERMIT NO.

DATE ISSUED

15. COUNTY OR PARISH

16. STATE

Lea

New Mexico

17. DATE SPILLED 18. DATE T.D. REACHED 19. DATE COMPL. (Ready to prod.) 20. ELEVATIONS (MD, RKB, RT, GE, ETC.) 21. ELEV. Casinghead

10/04/85 10/12/85 10/20/85 3750.8 GL

22. TOTAL DEPTH, MD &amp; TVD 23. PLUG, BACK T.D., MD &amp; TVD 24. IF MULTIPLE COMPL., HOW MANY? 25. INTERVAL DRILLED BY ROTARY TOOLS CABLE TOOLS

4225'

4156'

0-4225'

No

26. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 27. WAS WELL COILED No

4096 - 4130' (Penrose Sand)

28. TYPE ELECTRIC AND OTHER LOGS RUN 29. Casing Record (Report all strings set in well)

CNL/LDT, DLL/MSFL, CBL

Casing Size Weight, lb./ft. Depth Set (MD) Hole Size Cementing Record Amount Pulled

8 5/8"	23#	420'	12 1/4"	250 sx Class "C" w/2% CaCl	
4 1/2"	9.5#	4220'	7 7/8"	860 sx "Lite" + 300 SX Poz "C"	

30. Liner Record				31. Tubing Record		
SIZE	TOP (MD)	BOTTOM (MD)	BACK & CEMENT*	SIZE	DEPTH SET (MD)	PACKER SET (MD)
				2 3/8"	4040'	4040'

32. Perforation Record (Interval, size and number)			33. Acid, Shot, Fracture, Cement Squeeze, Etc.		
			DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED	
4096-4102'	-	2 SPF	4096-4130	3000 gal NEFE Acid	
4108-4130'	-	2 SPF			
Total	56 holes				

34. Production		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)					WELL STATUS (Producing or shut-in)	
DATE FIRST PRODUCTION	10/27/85	Flowing					Producing	

DATE OF TEST	HOURS TESTED	CHOKE SIZE	FLOWN. FOR TEST PERIOD	OIL-BBL	GAS-BBL	WATER-BBL	GAS-OIL RATIO
10/26/85	24	10/64	→	7	30	0	4,285/1
FLOW. TURBO PRESS.	CAKING PREVING	CALCULATED 24-HOUR RATE	OIL-BBL	ACCEPTED FOR RECORD	TURB.-BBL	0	30°

35. Disposition of Gas (Gold, used for fuel, vented, etc.)	TEST WITNESSED BY
Sold to Phillips Petroleum Company	Mike Mooney

36. LIST OF ATTACHMENTS

37. Deviation Survey, N.M. Form C-104

38. I hereby certify that the foregoing and attached information is true and correct as determined from all available records.

SIGNED: *John J. Murphy*

TITLE Drilg. &amp; Prod. Manager

DATE 10/22/85

\* (See Instructions and Spaces for Additional Data on Reverse Side)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPL. SET\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.5.RECEIVED  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*1a. TYPE OF WELL: OIL WELL  GAS WELL  DRILLING OTHER  JUN 17 1983 9 29 AM '83

## b. TYPE OF COMPLETION:

NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF. RESVR.BUR. OF LAND MGMT  
ROSWELL DISTRICT

## c. NAME OF OPERATOR

Petroleum Corporation of Texas

## d. ADDRESS OF OPERATOR

Box 911, Breckenridge, Texas 76024

## e. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 660' FSL &amp; 710' FWL

At top prod. interval reported below Same

At total depth Same

14. PERMIT NO. DATE ISSUED  
3-31-8315. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DE, R.R., RT, CR, ETC.)\* 19. ELEV. Casinghead  
4-21-83 4-29-83 5-25-83 3757' GR20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS  
4300' 4277' → Yes24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 25. WAS DIRECTIONAL SURVEY MADE  
4088-4130' - Lower Queen; 3846-3880' - Upper Queen no26. TYPE ELECTRIC AND OTHER LOGS RUN 27. WAS WELL CORED  
Litho Density no

CASING RECORD (Report all strings set in well)				
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD
8-5/8"	24	1200'	11"	700 sx. Cl. C 2%CC
5-1/2"	15.5	4300'	7-7/8"	1300 sx. Cl. C 2%CC

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	RACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-3/8"	4274'	

PERFORATION RECORD (Interval, size and number)					ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.		
					DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED	
4088-4130' (1 spf)	.40				4088-4130'	Acidized w/5000 gal. 15% NE	
3846-3880' (1 spf)	.40				3846-3880'	Acidized w/1500 gal. 15% NE	
						Frac'd w/30,000# 20/40, 17,500#	
						10/20 sd.	

PRODUCTION							
DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)		
5-25-83	Pumping	1-1/2"	Insert Pump				Producing
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD N. FOR TEST PERIOD	ÖIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
6-15-83	24 hrs.	----	→	28	55	tr.	1964
FLOW, TUBING PRESS.	CASINO PRESSURE	CALCULATED 24-HOUR RATE	ÖIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
-----	25#	→	28 ACCEPTED FOB RECORD		tr.		32

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY  
Sold Roy Turner

35. LIST OF ATTACHMENTS JUN 17 1983

Litho Density Logs

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Ledean Layland

TITLE Production Clerk

DATE 6-16-83

\*(See Instructions and Spaces for Additional Data on Reverse Side)\*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R365.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL: OIL  GAS  DRY  Other

b. TYPE OF COMPLETION:

NEW  WORK  DEEPEN  PLUG BACK  DIFF. DRIVE  Other

2. NAME OF OPERATOR

*International Oil & Gas Corporation*

3. ADDRESS OF OPERATOR

*P. O. Box 427, Artesia, New Mexico*

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface

*660' FEL and 1980' FSL*

At top prod. interval reported below

*10,502' - 10,516'*

At total depth

*10,685' - 10,712'*

14. PERMIT NO. DATE ISSUED

15. DATE SPUNDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (FT. A.S.P., M.E.L., ETC.)	19. ELEV. CARRYING HEAD
9-15-65	11-13-65	11-13-65	3770 ft	3770 ft
20. TOTAL DEPTH, MD & TVD	21. PLUG, BACKET, ETC.	22. MULTIPLE COMPL.	23. INTERVALS DRILLED BY	24. ROTARY TOOLS
11,712'	10,700'	10,502' - 10,516'	10,502' - 10,516'	CABLE TOOLS
25. PRODUCING INTERVAL(S), OR THIS COMPLETION - TOP, BOTTOM, MD, TVD	26. TYPE ELECTRIC AND OTHER LOGS RUN	27. WELL NUMBER	28. SURVEY-MAG	29. WELL COLOR
10,502' - 10,516'	20. 10,502' - 10,516'	21. 10,502' - 10,516'	22. 10,502' - 10,516'	23. Yellow
10,685' - 10,712'	21. 10,685' - 10,712'	22. 10,685' - 10,712'	23. 10,685' - 10,712'	24. Yellow

25. CAVING RECORD (Report all strings set in well)

CAVING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CAVING RECORD	AMOUNT PULLED
13 3/8"OD	44	7580	7 7/8"	575 cu. ft. air to 2600	0
8 5/8"OD	244-324	3465	11 1/2"	1700 cu. ft. air to 3500	0
5 1/2"OD	174	10767	7 7/8"	400 cu. ft. T/Cm. 8300	0

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
10 7/8"	10,502	10,516	10,502	2 1/16"OD	10,502	10,460
10 7/8"	10,685	10,712	10,685	2 1/16"OD	10,685	10,460
10 7/8"	10,685	10,712	10,685	2 1/16"OD	10,685	10,460

31. LITHOLOGY RECORD (Interval, size, and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
10,502 - 10,516	2800 gal. CRA Acid
10,685 - 10,712	5200 gal. CRA Acid

37. PRODUCTION

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in)

DATE OF TEST	BOURN TESTED	CHOKE SIZE	PROD'N. FOR. OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL/GAS RATIO
11-13-65	9	11	293.39	283.7	0	965
FLOW, TUBING PRESS.	GAGING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL GRAVITY-API (CON)

34. DISTRIBUTION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY
C. R. Appledorn

35. LIST OF ATTACHMENTS

ER-Sonic, 11 logs (1 copy) (1 copy mailed 11-12-65)

I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *C.R. Appledorn*TITLE *District Superintendent*DATE *11-15-65*

\*(See Instructions and Spaces for Additional Data on Reverse Side)

DEPARTMENT OF THE INTERIOR  
BUR. OF LAND MANAGEMENT

NM-59044

## SUNDY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)1. WELL  GAS  OTHER

2. NAME OF OPERATOR

Cavalcade Oil Corporation

3. ADDRESS OF OPERATOR

P.O. Box 16187, Lubbock, Texas 79490

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
Set aside space 17 below.  
At surface

1980' FSL &amp; 660' FEL

5. PERMIT NO.

16. ELEVATIONS (Show whether SF, ST, OR SLA)

3760'

7. UNIT/ASSIGNMENT NAME

8. FARM OR LEASE NAME

Cavalcade "21" Federal

9. WELL NO.

3

10. FIELD AND POOL, OR WILDCAT

Young Wolfcamp

11. SEC., T., R., M., OR SLOPE, AND SURVEY OR AREA

Sec. 21, T-18-S, R-32-E

12. COUNTY OR PARISH 13. STATE

Lea

NM

18.

## Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TEST WATER SHOT-OFF   
 FRACTURE TREAT   
 ROOT OR ACIDISE   
 REPAIR WELL   
 (Other)

PULL OR ALTER CASING   
 MULTIPLE COMPLETION   
 ABANDON   
 CHANGE PLANE

WATER SHOT-OFF   
 FRACTURE TREATMENT   
 SHOOTING OR ACIDISING   
 (Other) Reentry

REPAIRING WELL   
 ALTERING CASING   
 ABANDONMENT

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

17. OPERATING 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 borehole points to this work.)

10/19/85 Cavalcade Oil Corporation reentered the Cavalcade "21" Federal #3 to a depth of 9900'.

Plug #1	15'	- 27'
Plug #2	504'	- 800'
Plug #3	976'	-1046'
Plug #4	5697'	-6026'
Plug #5	7806'	-8072'

TD 9900'

10/21-22/85 Run cased hole logs, shut well in to evaluate completion into Bone Springs formation - scheduled for 3/1/86.

ACCEPTED FOR RECORD

*John*

FEB 20 1986

RECEIVED

FEB 18 1986

CAPSRAD, NEW MEXICO

HOBBS, NEW MEXICO

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

Attest: *John G. Homan* TITLE Drilling & Production Mgr. DATE 2/14/86

For use by Federal or State Office only

Attest: *John G. Homan* TITLE DATE

Conditions of Approval if any:

\*See Instructions on Reverse Side

I, John G. Homan, do hereby swear or affirm under penalty of perjury that I have not made, and will not make, any statement or representation which is false or which is given with intent to deceive or which is given with knowledge that it is false, in any manner or in any way which is calculated to mislead or induce the Department of the Interior or any of its employees or agents to act upon any statement or representation as to any matter within its jurisdiction.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TR DATE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1A. TYPE OF WORK

DRILL

DEEPEN

PLUG BACK

1B. TYPE OF WELL

OIL WELL

GAS WELL

OTHER Re-Entry

SINGLE ZONE

MULTIPLE ZONE

2. NAME OF OPERATOR

Gary Bennett

3. ADDRESS OF OPERATOR

POB 16844, Lubbock, TX 79490

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface 1980' FSL & 660' FEL

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

9 miles south from Maljamar, NM

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

(Also to nearest dril. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

240

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

1650'

19. PROPOSED DEPTH

10,787'

20. ROTARY OR CABLE TOOLS

Reverse Pulling Unit

21. ELEVATIONS (Show whether DP, RT, GR, etc.)

3760' GR

22. APPROX. DATE WORK WILL START\*

November 20, 1987

23. PROPOSED CASING AND CEMENTING PROGRAM

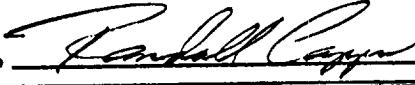
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48.0#	753'	575 sx circ to surface
11 1/2"	8 5/8"	24-32#	3465'	1700 sx circ to surface
7 7/8"	5 1/2"	17.0#	10,787'	400 sx t/cmt @ 8300'

Please refer to Cavalcade Oil Corporation permit dated 12/11/85, we propose to continue Cavalcades' operation in attempt to fully evaluate the Wolfcamp, Bone Spring and Queen formations.

All pertinent information pertaining to this APD is contained in the Cavalcade APD.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

  
SIGNED \_\_\_\_\_

TITLE consultant

DATE 11/5/87

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

DATE \_\_\_\_\_

\*See Instructions On Reverse Side