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October 19, 1981

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

RE: Anadarko Production Company  
Teas Yates Unit

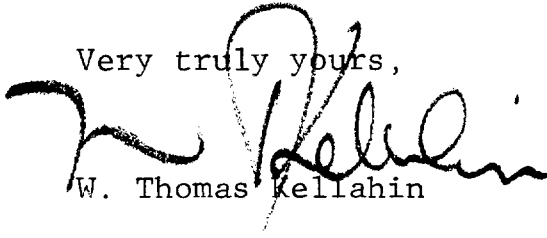
Dear Mr. Ramey:

Anadarko Production Company operates the Teas Yates Waterflood pursuant to Oil Conservation Division Order R-4077.

They desire to add an injector well #10-3 located 2265 feet from the North line and 1425 feet from the East line of Section 14, T20S, R33E, NMPM.

Enclosed is an Administrative Application requesting such approval.

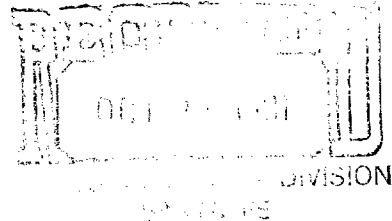
Very truly yours,

  
W. Thomas Kellahin

WTK:jm

cc: (w/encl.)

Anadarko Production Company  
OCD - Artesia  
Bureau of Land Management  
U.S.G.S.  
Hudson & Hudson  
Grace Petroleum Company  
Phillips Petroleum Company  
Union Texas Petroleum



## APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Anadarko Production Company  
Address: P. O. Box 2497, Midland, Texas 79702  
Contact party: Mr. Dan Kernaghan Phone: (915) 682-1666
- 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 R-4677
- 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: W. Thomas Kellahin Title: Attorney  
Signature: [Signature] Date: October 14, 1981

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.

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

#### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

ANADARKO PRODUCTION COMPANY

Teas Yates Unit  
Injection Well #10-3  
Sec. 14, T20S, R33E  
Lea County, New Mexico

- Exhibit A - Map required by Paragraph V C-108
- Exhibit A-1 - OCD Order R-4077
- Exhibit B - Tabular Summary Required by Paragraph VI of C-108
- Exhibit C - Data sheet required by Paragraph VII of C-108
- Exhibit D - Geological Data - Paragraph VIII
- Exhibit E - Log of Injection Well - not applicable
- Exhibit F - Data Sheet on Injection Well
- Exhibit G - Schematic proposed Injection well
- Exhibit H - Schematic of P & A wells within 1 mile
- Exhibit I - Water Quality from nearest fresh water wells
- Exhibit J - Statement per Paragraph XII of C-108
- Exhibit K - Notice Requirements



Grace Pet. KGS  
2.1.82 1523 32  
40405

(West'n Drig) Union Tex. Fed  
Anderson  
Prichard  
TD 3410

Phillips  
A.R. Co.  
13280  
Grace Pet. KGS  
1523 32

Grace Pet.  
2.1.82  
10405

Un  
B. 34

Exhibit  
A

Grace Pet. KGS  
1523 32

Anadarko  
S/R 1.1AB  
PI 12  
Tr. 13

(A.R. Co.)  
(ARC)  
U.S.

Grace Pet.  
KGS  
1523 32

Jeffers  
TD 3557

U.S. MI  
Mark Amith,

Union Tex. Anadarko  
Pet. Yates S/R  
Tex. Pac. Disc 86  
01959  
R. Co.

TD 3385  
C. 9.28.53  
PI 1.1A  
2.21.75  
Anadarko  
065658

Reserve  
U.S. Disc  
Tr. 11  
Fed

So. Calif. Pet.  
B45  
064975

Reserve O.E.G.  
4WI (So. Calif.)  
(4-20) Fed-Bobb  
TD 3556

U.S. MI  
Mark Smith  
Tex HB

Knox  
enneco - Fed  
D 3418  
1/41.15.64

Tr. 5  
McHaffey  
3 (So. Calif. 6X50. Calif. Pet.)  
(Fed-Forrest)  
TD 3455

(DD) 2 Reserve  
Tr. 10  
065658

(So. Calif.)  
Tr. 8  
Reserve O.E.G.  
13-2

Tr. 4  
Tr. 3

Tr. 1  
Wollen Prod  
Wollen - Fed  
TD 3556  
Cif. Ser

W.H. Black  
(bp. agmt.)  
to 4000'  
Union

Tr. 6  
Anadarko  
067265 A 7

(DD) 1.8  
(1.3) (WO)  
Tr. 12  
2351  
Tr. 14  
11750 12744

(Spartan)  
Turner-Fed  
Tr. 2  
TD 3535

Tr. 3  
Fed-Bobb  
TD 3540

Tenneco  
HBP  
13279

A.R. Co.  
S/R 13278  
Capitan

Anadarko  
KGS  
Hudson E.  
Hudson  
2.1.78  
4313

T.B.  
Boston  
11969

Reserve  
O.E.G.  
HBP  
2.1.83

Wollen Prod  
Wollen - Fed  
TD 3556  
Cif. Ser

M.J. Harvey, Jr.

So. Union

Energy

O'Kane

Wenden

40034



BEFORE THE OIL CONSERVATION COMMISSION  
OF 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. 4470  
Order No. R-4077

APPLICATION OF ANADARKO PRODUCTION  
COMPANY FOR A WATERFLOOD PROJECT,  
LEA COUNTY, NEW MEXICO.

Exhibit  
A-1

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 2, 1970, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 8th day of December, 1970, 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, Anadarko Production Company, seeks authority to institute a waterflood project in its Teas Yates Unit Area, Teas Yates-Seven Rivers Pool, by the injection of water into the Yates formation through ten injection wells in Township 20 South, Ranges 33 and 34 East, NMPM, Lea County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Anadarko Production Company, is hereby authorized to institute a waterflood project in its Teas Yates Unit Area, Teas Yates-Seven Rivers Pool, by the injection of water into the Yates formation through the following-described ten wells in Lea County, New Mexico:

UNIT WELL NO.	PREVIOUS OPERATOR, LEASE AND WELL NO.	L o c a t i o n			
		UNIT	SECTION	TOWNSHIP	RANGE
13-1	Anadarko Federal AB No. 1	M	11	20 South 33	East
2-2	Reserve Federal Bobb No. 2	D	13	20 South 33	East
3-2	Reserve Federal Bobb "C" No. 2	J	13	20 South 33	East
3-4	Reserve Federal Bobb "C" No. 4	B	13	20 South 33	East
6-1	Anadarko Sinclair Federal No.1	L	14	20 South 33	East
9-1	Anadarko Federal "C" No. 1	N	14	20 South 33	East
11-1	Reserve Federal 1-14 No. 1	B	14	20 South 33	East
15-1	Spartan Drilling Co. Federal No. 1	I	14	20 South 33	East
12-1	Anadarko Federal AC No. 1	A	15	20 South 33	East
1-1	Cities Service Jewell McDonald No. 1	E	18	20 South 34	East

(2) That the subject waterflood project is hereby designated the Anadarko Teas Yates Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) 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

DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

S E A L

A. L. PORTER, Jr., Member & Secretary

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date		Depth		Zone(s)	Record of Completion: Perf(s) and Well Construction
Teas Yates Unit 2-2 Operator: Anadarko Production Company	660' FNL & 330' FWL, Unit D, Sec. 13, T20S, R33E	Water Injector	10-25-54	11-21-54	3359' Deepened to 3535'		Yates	Open Hole: 3325'-3535' Casing: 5-1/2" @ 3325' cemented w/ 200 sxs at shoe and 200 sxs squeezed thru perf at 1410'. 2-3/8" Salta lined tubing and packer set at 3290' Cable Tool Drilled. Contractor: J. C. Clower
Mahaffey-Fed. ARC #1 Operator: Arco	660' FNL & 1980' FWL, Unit C, Sec. 14, T20S, R33E	Gas Producer (Dual) Morrow currently Shut-in	4-30-62	12-6-62 (BS) 12-31-62 (M)	14,948'	13,800'	Bone Spring Morrow	Perfs: Morrow 13,294'-302', 13,309'- 317', 13.423'-429', 13,526'-528', 13,532'-543'. Bone Springs 9408'- 14', 9416'-18', 9422'-24', 9430'- 9434', 9442'-50', 9454'-57'. Casing: 20" @ 1400' w/1900 sxs, 13-3/8" @ 3100' w/3500 sxs, 9-5/8" @ 9000' w/2620 sxs, 7" @ 13,813' w/1350 sxs. Rotary Tool.
Teas Yates Unit 5-1 Operator: Anadarko Production Company	660' FNL & 660' FWL, Unit D, Sec. 14, T20S, R33E	Oil Producer (P&A)	8-26-53	9-30-53	3388'	3266'	Yates Rivers	Open Hole: 3373'-85' Casing: 5-1/2" @ 3250' w/50 sxs + 370 sxs thru perf @ 1500'. Pulled tbg & filled w/cmt to surf to P&A. Cable Tool Drilled Contractor: J. C. Clower
Teas Yates Unit 5-2 Operator: Anadarko Production Company	660' FNL & 1650' FWL, Unit C, Sec. 14, T20S, R33E	Oil Producer	10-4-53	10-29-53	3278' Deepened to 3392'	3370'	Yates Rivers	Open Hole: 3225'-3392' Casing: 13-3/8" @ 71', 10-3/4" @ 575', 7" @ 3240' w/50 sxs (and 420 sxs @ 1000'±). 2" tbg @ 3286'. Cable Tool Drilled Contractor: J. C. Clower



Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date		Depth		Zone(s)	Record of Completion: Perf.(s) and Well Construction
Teas Yates Unit 5-3 Operator: Anadarko Production Company	1980' FNL & 1650' FWL, Unit F, Sec. 14, T20S, R33E	Oil Producer	12-9-53 (Recompleted: 5-29-56)	12-16-53	3397'	3377'	Yates 7 Rivers	Perfs: 3210'-35', 3265'-85' Casing: 7" set @ 3330' w/100 sxs (+400 sxs @ 1000'), 4-1/2" 3397' w/375 sxs. 2" tbg to 3285'. Rotary Tool Drilled Contractor: J. C. Clower
Teas Yates Unit 5-4 Operator: Anadarko Production Company	2310' FNL & 990' FWL, Unit E, Sec. 14, T20S, R33E	Oil Producer (P&A)	12-24-53 (P&A: Dec. 1958)	1-22-54	3416'	3400'	Yates 7 Rivers	Open Hole: 3370'-3400' Casing: 7" @ 3370' cmted w/450 sxs, circ 30 sxs, 2" tbg pulled. Open Hole: 6". Cemented to surface- P&A. Cable Tool Drilled. Contractor: J. C. Clower
Teas Yates Unit 5-5 Operator: Anadarko Production Company	990' FNL & 990' FWL, Unit D, Sec. 14, T20S, R33E	Oil Producer	7-9-74	9-15-74	3375'	3265'	Yates 7 Rivers	Perfs: 3137'-3250', 3277'-3338' Casing: 9-5/8" @ 1420' cmted w/560 sxs (circulated), 7" @ 3085' w/420 sxs cmt, 5-1/2" liner w/top @ 2943' & bottom @ 3375', cmted w/50 sxs. 2-3/8" tbg @ 3106'. Rotary Tool Drilled. Contractor: Cactus Drilg. Co.
Teas Yates Unit 6-1 Operator: Anadarko Production Company	990' FSL & 2310' FWL, Unit L, Sec. 14, T20S, R33E	Water Injection	8-1-65 (Converted: 5-3-72)	10-28-65	3428'	3418'	Yates	Perfs: 3236'-40', 3244'-47', 3252'- 56'. Casing: 8-5/8" @ 950' w/300 sxs cmt, 4-1/2" @ 3426' w/523 sxs cmt, pulled & 2" Salta lined injection tubing @ 3095' injection. Rotary Tool Drilled. Contractor: N/A

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date Started Completed	Depth TD PBD	Zone(s)	Record of Completion: Perf(s) and Well Construction
Teas Yates Unit 7-1 Operator: Anadarko Production Company	2310'FSL & 1960'FWL, Unit K, Sec. 14, T20S, R33E	Oil Producer  (Recompleted: June 1977)	2-26-54 3-10-54  (Recompleted: June 1977)	3324' Deepened to 3420'	Yates 7 Rivers	Perfs: 3180'-97', 3210'-14', 3227'- 59', Open Hole: 3280'-3420'. Casing: 7" @ 3280' cmted w/100 sxs + 310 sxs @ 1000'. 2" tbg @ 3275'. Contractor: J. C. Clower
Teas Yates Unit 8-1 Operator: Anadarko Production Company	1980'FNL & 660'FWL, Unit E, Sec. 13, T20S, R33E	Oil Producer (P&A)	2-27-51 3-29-51  (P&A: July 1956)	3338'  3199'	Yates	Perfs: 1385'-86' to squeeze cmt. Open Hole: 3178'-3338'. Casing: 7" @ 3178' cmted w/100 sxs, (200 sxs in squeeze @ 1385). Cable Tool Drilled. Contractor: Spartan Drilg. Co.
Teas Yates Unit 8-2 Operator: Anadarko Production Company	1980'FNL & 990'FWL, Unit E, Sec. 13, T20S, R33E	Oil Producer  (Recompleted: 10-27-77)	5-21-56 7-14-56  (Recompleted: 10-27-77)	3328' Deepened to 3410'	Yates	Open Hole: 3252'-3410' Casing: 8-5/8" @ 1500' w/450 sxs, circulated. 5-1/2" @ 3252' w/175 sxs, tbg: 2-7/8" @ 3291'. Open Hole: 4-3/4". Cable Tool Drilled. Contractor: Thomas Drilg. Co.
Teas Yates Unit 10-1 Operator: Anadarko Production Company	1650'FNL & 330'FEL, Unit H, Sec. 14, T20S, R33E	Oil Producer  (Recompleted: April 1954) (Recompleted: 10-18-77)	6-28-52 8-15-52  (Recompleted: April 1954) (Recompleted: 10-18-77)	3315' Deepened to 3341' Deepened to 3428'	Yates	Open Hole: 3209'-3341' Casing: 5-1/2" @ 3252' w/175 sxs, Tbg: 2-7/8" @ 3291'. Open Hole: 4-3/4". Cable Tool Drilled. Contractor: Martin Drilg. Co.
Teas Yates Unit 10-2 Operator: Anadarko Production Company	1650'FNL & 2310'FEL, Unit G, Sec. 14, T20S, R33E	Oil Producer  (Recompleted: 5-6-77)	2-13-54 3-18-54  (Recompleted: 5-6-77)	3330' Deepened to 3394'  3328' now to 3394'	Yates	Perfs: 3228'-3394', Open Hole: 3202'-24'. Casing: 5-1/2" @ 3228' w/100 sxs @ shoe & 150 sxs @ 1368'. Open Hole: 4-3/4". Cable Tool Drilled. Contractor: N/A

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date		Depth		Zone(s)	Record of Completion: Perf(s) and Well Construction
Teas Yates Unit 11-1 Operator: Anadarko Production Company	990'FNL & 2310'FEL, Unit B, Sec. 14, T20S, R33E	Water Injector	12-19-54	1-28-55 (Converted: 5-6-72)	3319'	3288'	Yates	Open Hole: 3215'-3288' Casing: 5-1/2" @ 3215' w/435 sxs cmt circulated to surf., 2" Salta Lined tbg @ 3145'. Cable Tool Drilled. Contractor: J. C. Clower
Teas Yates Unit 14-2 Operator: Anadarko Production Company	2310'FSL & 2310'FEL, Unit J, Sec. 14, T20S, R33E	Oil Producer	5-29-74	10-8-74 (P&A: 1-1-55) (Re-entered: 5-29-74)	3455'	3440'	Yates	Perfs: 3212'-80', 3316'-34' Casing: 10-3/4" @ 513' w/456 sxs, circulated. 4-1/2" @3455' w/765 sxs, circulated, 2-3/8" tbg @ 3340'. Rotary Tool Drilled. Contractor: N/A
Teas Yates Unit 15-1 Operator: Anadarko Production Company	1980'FSL & 660'FEL, Unit I, Sec. 14, T20S, R33E	Water Injector	6-18-51 Respud 7-12-74 (P&A: 6-18-51) (Re-entry & Conversion 2-28-75)		3535'	3523'	Yates 7 Rivers	Perfs: 3261'-76', 3282'-99', 3319'- 25', 3334'-43', 3348'-58', 3380'- 86', 3392'-3400'. Casing: 10-3/4" @ 510' w/635 sxs cmt, 4-1/2" @ 3517' w/1260 sxs (150 sxs circ. to pit). 2-3/8" Salta Lined tbg @ 3191'. Cable Tool Drilled. (Rotary or Re-entry). Contractor: N/A
Teas Yates Unit 9-1 Operator: Anadarko Production Company	990'FSL & 2310'FNL, Unit N, Sec. 14, T20S, R33E	Water Injector	3-22-54	4-20-54 (Converted: 5-6-72)	3338'	3294'	Yates 7 Rivers	Perfs: 3267'-71', 3275'-86', Open Hole: 3294'-3338'. Casing: 7" @ 3290' w/420 sxs. Pulled & set 2" Salta Lined tbg @ 3207' for injection. Cable Tool Drilled. Contractor: J. C. Clower

ANADARKO PRODUCTION COMPANY

Exhibit C

Teas Yates Unit  
Injection Well #10-3  
Section 14  
T20S, R33E, NMPM  
Lea County, New Mexico

Data on Proposed Operation

1. Proposed average and maximum daily rate and volume of fluids to be injected:

Average daily rate of 250 BWIPD  
Maximum daily rate of 400 BWIPD

2. System is closed.

3. Proposed average and maximum injection pressure:

Average injection pressure:  
Maximum injection pressure:

The proposed average and maximum injection pressure is to be determined from step rate tests to be run after the well is drilled.

4. (a) Source of injection fluid:

Produced water from Teas Yates-Seven Rivers Pool

- (b) Analysis of formation fluid:

Not applicable

5. Zone of disposal is productive of oil and gas within one mile of the proposed disposal well.



ANADARKO PRODUCTION COMPANY

Exhibit D

Teas Yates Unit  
Injection Well #10-3  
Section 14  
T20S, R35E, NMPM  
Lea County, New Mexico

Geological Data on Injection Zone

Pool: Teas Yates-Seven Rivers  
Formation: Yates  
Geological Name: Yates  
Thickness: at 200 feet  
Depth: at 3200 feet  
Injection Interval: 3200-3400 feet

Ref: Para III-C-108

ANADARKO PRODUCTION COMPANY

Exhibit F

Teas Yates Unit  
Injection Well #10-3  
Section 14  
T20S, R33E, NMPM  
Lea County, New Mexico

WELL DATA ON INJECTION WELL

Stimulation Program: an acid job consisting of approximately  
5000 gallons of 20% NE-FE acid

Log: n/a

A(1) Injection Well #10-3  
2265 feet from North line and 1425  
feet from East line Section 14,  
T20S, R33E, NMPM, Lea County, New Mexico

A(2) Casing Strings:

1. 10 3/4" casing set 1200 feet to be cemented  
to surface

200± barrels per day of produced/  
salt water mixture injected at  
an estimated pressure of 1400 PSIG

10-3/4" casing set  
at 1200' cemented  
to surface

7" or 7-5/8" casing set  
at 3100' with cement  
circulated to surface

4-1/2" casing set at TD,  
with cement from TD to  
200' above base of salt.  
Treated fluid in annulus  
& Bradenhead equipped to  
detect leakage or pressure.

Top Salt @ 1520'

S  
A  
L  
T

*use 2 7/8 or 2 3/8 plunger  
lined  
tubing  
OAS*

*Cement 200' above salt 2830*

Base Salt @ 3030'

*will use  
BAKER LOCK SET PACKER  
SET AT 3100' OAS*

T/Yates pay @ 3200'

Injection interval 3200'-3400'

T.D. 3415'

*Need to possibly  
change casing schedule*

RECEIVED  
BLM MAIL ROOM

OCT 21 8 53 AM '81

STATE OFFICE  
SANTA FE, N. MEX.



200± barrels per day of produced/  
salt water mixture injected at  
an estimated pressure of 1400 PSIG

10-3/4" casing set  
at 1200' cemented  
to surface

7" or 7-5/8" casing set  
at 3100' with cement  
circulated to surface

4-1/2" casing set at TD,  
with cement from TD to  
200' above base of salt.  
Treated fluid in annulus  
& Bradenhead equipped to  
detect leakage or pressure.

Top Salt @ 1520'

S  
A  
L  
T

Base Salt @ 3030'

T/Yates pay @ 3200'

Injection interval 3200'-3400'

T.D. 3415'

*Hasil determine  
Cement at 200' above base  
of salt*

*Traces survey*



P & A: Dec ,1958

Well Name & Number:

Teas Yates Unit 5-4 (APC)

Location:

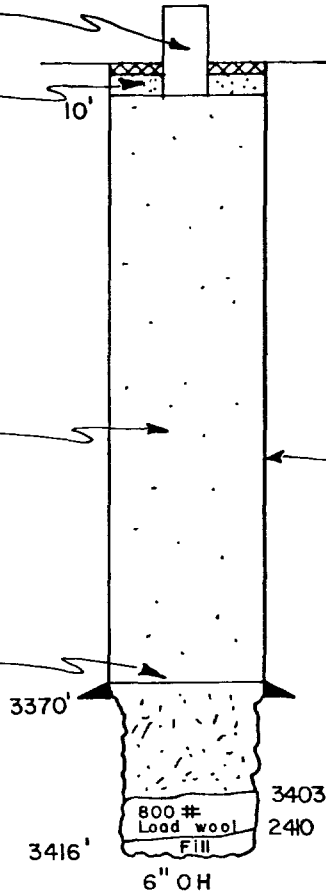
2310' FNL, 990' FWL, Unit E  
Sec.14, T20S R33E

4" pipe placed in plug  
extends 5' above surf.

Cmt plug of 15 sxs in top  
of hole.

gelled mud fills Casing to  
within 10' of surf.

Cmt plug of 20 sxs  
covers OH.



TOC:

Cement Circulated

7" csg

Csg:

7" csg @ 3370' cmtd w/450  
sxs @ shoe. Circ. 30 sx

TD: 3416'

Perfs:

None

Exhibit  
H

P & A: July, 1956

Well Name & Number:

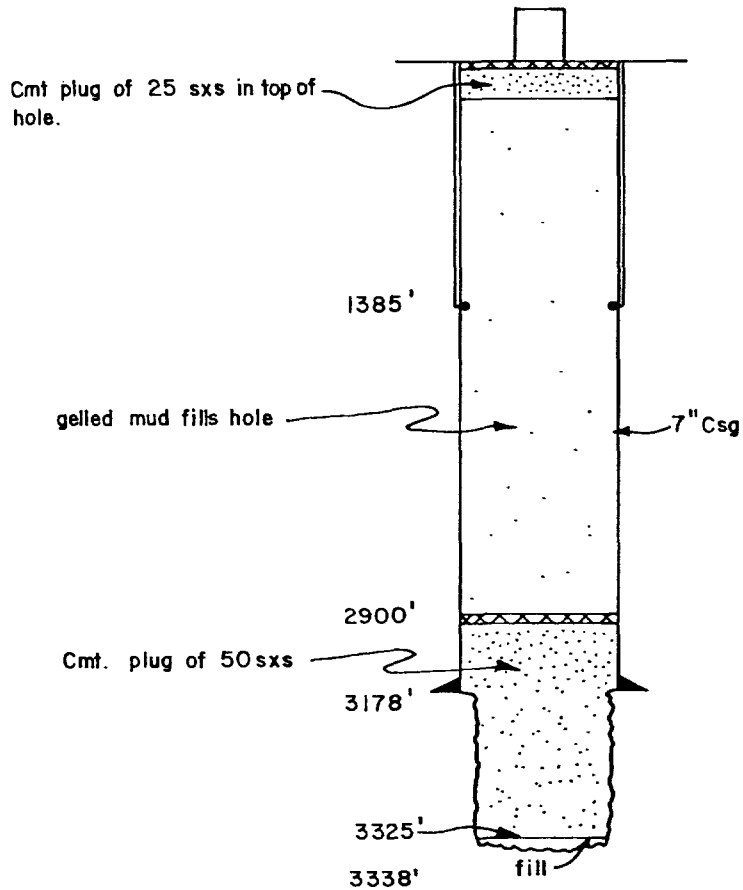
Teas Yates Unit 8-1 (APC)

Location:

1980' FNL, 660' FWL, Unit E  
Sec. 13, T20S R33E

TOC:

200 sxs thru. perf. @ 1385'



Csg:

7" csg @ 3178' cmt'd w/100  
sxs @ shoe.

TD: 3338'

Perfs:

Squeeze perf from 1385'-86'

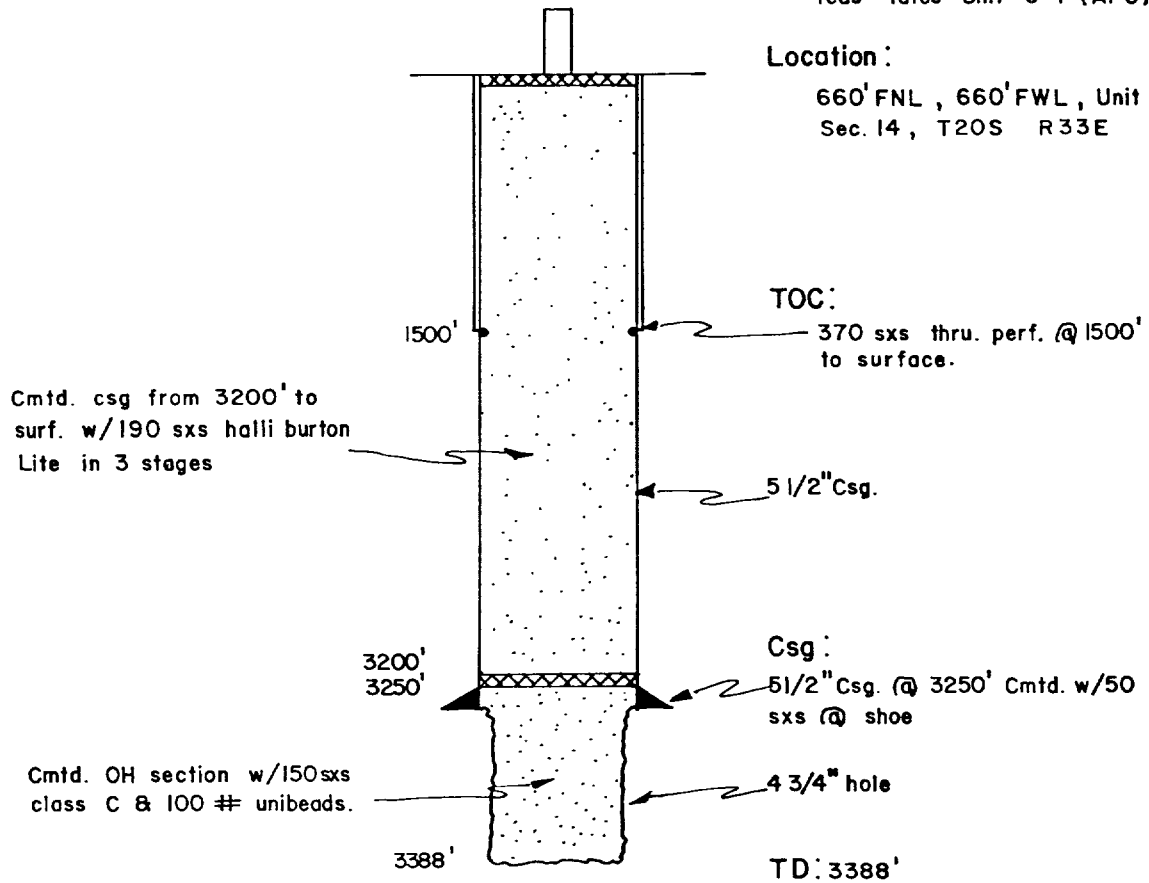
P & A : 2-21-75

Well Name & Number :

Teas Yates Unit 5-1 (APC)

Location :

660' FNL , 660' FWL , Unit D  
Sec. 14 , T20S R33E



Perfs :

Squeeze perf @ 1500'





709 W. INDIANA  
MIDLAND, TEXAS 79701  
PHONE 683-4521

By Waylan C. Martin, M. A.

709 W. INDIANA  
MIDLAND, TEXAS 79701  
PHONE 683-4521

By Wavlan C. Martin, M. A.

ANADARKO PRODUCTION COMPANY

Exhibit J

Teas Yates Unit  
Injector Well #10-3  
Section 14  
T20S, R33E, NMPM  
Lea County, New Mexico

AFFIRMATIVE STATEMENT

ANADARKO PRODUCTION COMPANY 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.

Ref: Para XIV

ANADARKO PRODUCTION COMPANY

Exhibit K

Teas Yates Unit  
Injection Well #10-3  
Section 14  
T20S, R33E, NMPM  
Lea County, New Mexico

NOTICE

Pursuant to Section XIV,

Applicant has mailed copies of the application to  
the following:

Surface owners:

Raul Martinez  
Bureau of Land Management  
P.O. Box 1449  
Santa Fe, New Mexico 87501

United States Geological Survey  
Suite 815, 505 Marquette N.W.  
Albuquerque, New Mexico 87102

Leasehold Operators within one-half mile:

ARCO Oil & Gas Company  
P.O. Box 1610  
Midland, Texas 79701

Hudson & Hudson  
1000 First National Bank Bldg.  
Fort Worth, Texas 76102  
Attn: Ed Hudson

Grace Petroleum Corporation  
Broadway Executive Park  
6501 North Broadway  
Oklahoma City, Oklahoma 73116

Phillips Petroleum Company  
4001 Penbrook  
Odessa, Texas 79762  
Attn: Bill Mueller

Union Texas Petroleum  
1300 Wilco Building  
Midland, Texas 70701

Applicant has caused to be published in the Lovington Leader,  
a newspaper of general circulation in Lea County, the attached  
notice.



NOTICE OF PUBLICATION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
SANTA FE, NEW MEXICO

NOTICE: To all persons having any right, title, interest  
or claim in the following:

Pursuant to the Rules and Regulations of the New Mexico Oil Conservation Division, Anadarko Production Company, hereby gives public notice that it has applied to the Division for an order approving its Teas Yates Unit Injector Well #10-3 to be located 2265 FNL and 1425 FEL, Section 14, T20S, R33E, NMPM, Lea County, New Mexico as a water injection well in the Teas Yates-Seven Rivers Pool at a depth of at 3200 feet at a maximum rate of 400 barrels per day at a maximum injection pressure to be set by the Division.

Any interested party must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within fifteen (15) days of the date of publication of this notice.

KELLAHIN & KELLAHIN  
Attorneys at Law  
P.O. Box 1769  
Santa Fe, New Mexico 87501  
(505) 982-4285  
Attorneys for Anadarko Production  
Company

KELLAHIN and KELLAHIN

*Attorneys at Law*

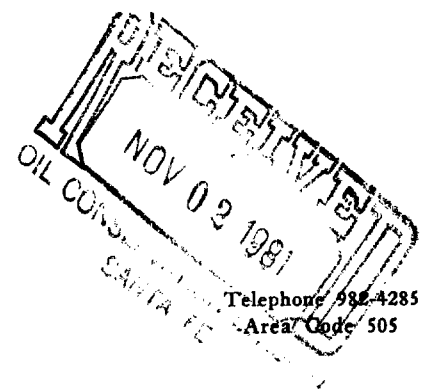
500 Don Gaspar Avenue

Post Office Box 1769

Santa Fe, New Mexico 87501

Jason Kellahin  
W. Thomas Kellahin

Karen Aubrey



October 30, 1981

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

RE: Anadarko Production Company

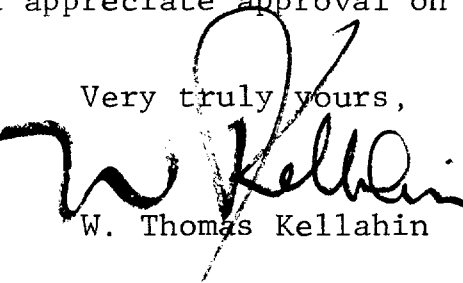
Dear Mr. Ramey:

On October 19, 1981, I filed on behalf of Anadarko Production Company an administrative application for the addition of an injector well to their Teas Yates Water-flood Project.

Enclosed is a copy of the certificate of newspaper publication and copies of all of the return receipts showing notice to all offset operators. Grace Petroleum Company was the last offset operator to receive notice on October 23, 1981. Therefore the 15 day period will expire on November 7, 1981.

Anadarko is anxious to commence this well. If everything is in order, we would appreciate approval on Monday, November 8, 1981.

Very truly yours,



W. Thomas Kellahin

WTK:jm  
Enclosures  
cc: Mr. Dan Kernaghan

NOV 02 1981  
OIL CONSERVATION DIVISION  
SANTA FE

That the notice which is hereto attached, entitled

## Notice of Publication

and numbered ..... in the  
..... Court of Lea  
County, New Mexico, was published in a regular and  
entire issue of THE LOVINGTON DAILY LEADER and  
not in any supplement thereof, once each week on the  
same day of the week, for One (1)  
consecutive weeks, beginning with the issue of .....  
October 22, 1981  
and ending with the issue of .....  
..... 19.....

And that the cost of publishing said notice is the sum of \$ 12.42.

which sum has been (Paid) (~~ASSET~~) as Court Costs

Subscribed and sworn to before me this 27th  
day of October 1981

Notary Public, Lea County, New Mexico

My Commission Expires September 28, 1982.[illegible]

PS Form 3811, Jan. 1979

● SENDER: Complete items 1, 2, and 3.  
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)  
☒ Show to whom and date delivered.....  
☐ Show to whom, date and address of delivery.....  
☐ RESTRICTED DELIVERY  
 Show to whom and date delivered.....  
☐ RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery.\$\_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 U.S.G.S.  
 Suite 815, 505 Marquette NW  
 Albuquerque, NM 87102

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 158 599

(Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☐ Authorized agent  
*David Huran*

4. DATE OF DELIVERY  
 22 OCT 1981

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS  
*Jm*

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Anadarko Prod. Co. ☆ GPO : 1979-288-848

PS Form 3811, Jan. 1979

● SENDER: Complete items 1, 2, and 3.  
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)  
☒ Show to whom and date delivered.....  
☐ Show to whom, date and address of delivery.....  
☐ RESTRICTED DELIVERY  
 Show to whom and date delivered.....  
☐ RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery.\$\_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Grace Petroleum Co.  
 Broadway Executive Park  
 6501 North Broadway  
 Oklahoma City, OK 73116

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 158 601

(Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☐ Authorized agent  
*O. B. Wiley*

4. DATE OF DELIVERY

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Anadarko Prod. Co. ☆ GPO : 1979-288-848

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☐ RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery.\$\_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Mr. Raul Martinez  
 Bureau of Land Management  
 P.O. Box 1449  
 Santa Fe, NM 87501

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 158 598

(Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☐ Authorized agent  
*/S/ CAREN T. CLINE*

4. DATE OF DELIVERY

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Anadarko Prod. Co. ☆ GPO : 1979-288-848

PS Form 3811, Jan. 1979

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☐ RESTRICTED DELIVERY.  
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(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Anadarko Production Co.  
 P.O. Box 2497  
 Midland, Texas 79702

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 158 596

(Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☐ Authorized agent  
*E. Doolley*

4. DATE OF DELIVERY

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

☆ GPO : 1979-288-848

PS Form 3811, Jan. 1979

● SENDER: Complete items 1, 2, and 3.  
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)  
☒ Show to whom and date delivered.....¢  
☐ Show to whom, date and address of delivery.....¢  
☐ RESTRICTED DELIVERY  
 Show to whom and date delivered.....¢  
☐ RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery.\$\_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Union Texas Petroleum  
 1300 Wilco Building  
 Midland, TX 70701

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 158 603

(Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☐ Authorized agent

4. DATE OF DELIVERY POSTMARK

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Anadarko Prod. Co. GPO : 1979-288-848

PS Form 3811, Jan. 1979

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☐ Show to whom, date and address of delivery.....¢  
☐ RESTRICTED DELIVERY  
 Show to whom and date delivered.....¢  
☐ RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery.\$\_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 OCD  
 Drawer DD  
 Atesia, NM 88210

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 158 597

(Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☒ Authorized agent

4. DATE OF DELIVERY POSTMARK

5. ADDRESS (Complete only if requested)

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Anadarko Prod. Co. GPO : 1979-288-848

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☐ Show to whom, date and address of delivery.....¢  
☐ RESTRICTED DELIVERY  
 Show to whom and date delivered.....¢  
☐ RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery.\$\_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Bill Mueller  
 Phillips Petroleum Company  
 4001 Penbrook  
 Odessa, TX 79762

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 158 602

(Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☐ Authorized agent

4. DATE OF DELIVERY POSTMARK

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Anadarko Prod. Co. GPO : 1979-288-848

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 Show to whom and date delivered.....¢  
☐ RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery.\$\_\_\_\_

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Ed Hudson  
 Hudson & Hudson  
 1000 First National Bnk Bldg.  
 Fort Worth, TX 76102

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 158 600

(Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☒ Authorized agent

4. DATE OF DELIVERY POSTMARK

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

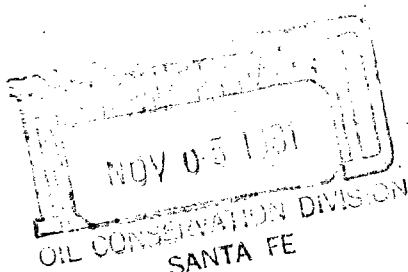
Anadarko Prod. Co. GPO : 1979-288-848

OIL CONSERVATION DIVISION  
DISTRICT I

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

DATE November 2, 1981

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed NSP \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX X \_\_\_\_\_  
Proposed PMX \_\_\_\_\_



Gentlemen:

I have examined the application for the:

Anadarko Production Co. Teas Yates Unit Tr. 10 No. 3-G 14-20-33  
Operator Lease and Well No. Unit, S - T - R

and my recommendations are as follows:

Should require tubing & packer---J.S.

Yours very truly,

*Note* { Anadarko agrees to use tubing  
+ packer as per telephone conversation  
on 12-8-81 4:00 PM with Tom Kolahon  
need to correctly change closing schedule

*Oscar Simpson*

/mc