

KELLAHIN and KELLAHIN

Attorneys at Law

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Post Office Box 1769

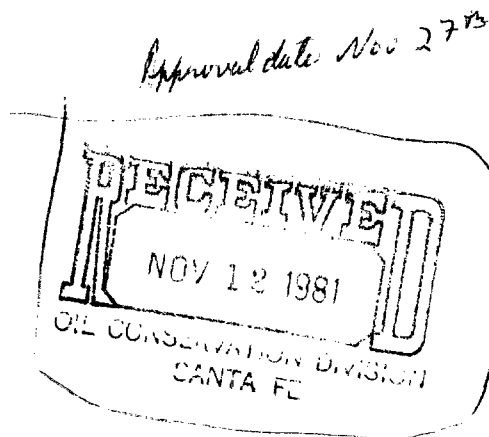
Santa Fe, New Mexico 87501

Jason Kellahin
W. Thomas Kellahin
Karen Aubrey

Telephone 982-4285
Area Code 505

November 10, 1981

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

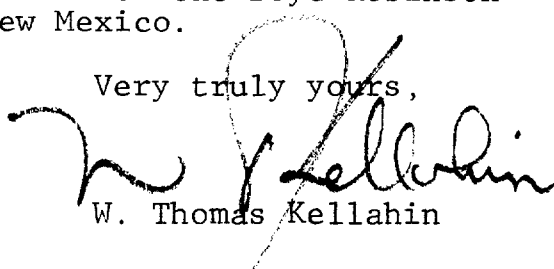


RE: Anadarko Production Company
Boyd-Robinson Waterflood

Dear Mr. Ramey:

Please find enclosed our application on behalf of Anadarko Production Company for an Administrative Order approving six injection wells for the Boyd Robinson Waterflood, Eddy County New Mexico.

Very truly yours,



W. Thomas Kellahin

WTK:jm

Enclosure

cc: Mr. Dan Kernaghan
Mr. Jerry Sexton
Offset Operators and Surface Owners

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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 and the project: R-5318
- 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 or 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: November 9, 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.

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

BOYD ROBINSON WATERFLOOD PROJECT
EDDY COUNTY, NEW MEXICO

INJECTION WELLS FOR GRAYBURG JACKSON POOL

Township 16 South, Range 31 East

Section 25:

Unit H - Baxter-Federal B #2 Well

Unit J - Robinson-Federal #6 Well

Unit N - Robinson-Federal #8 Well

Section 36:

Unit A - Brinson State #2 Well

Unit C - Brinson State #3 Well

Eddy Co.

Township 16 South, Range 32 East

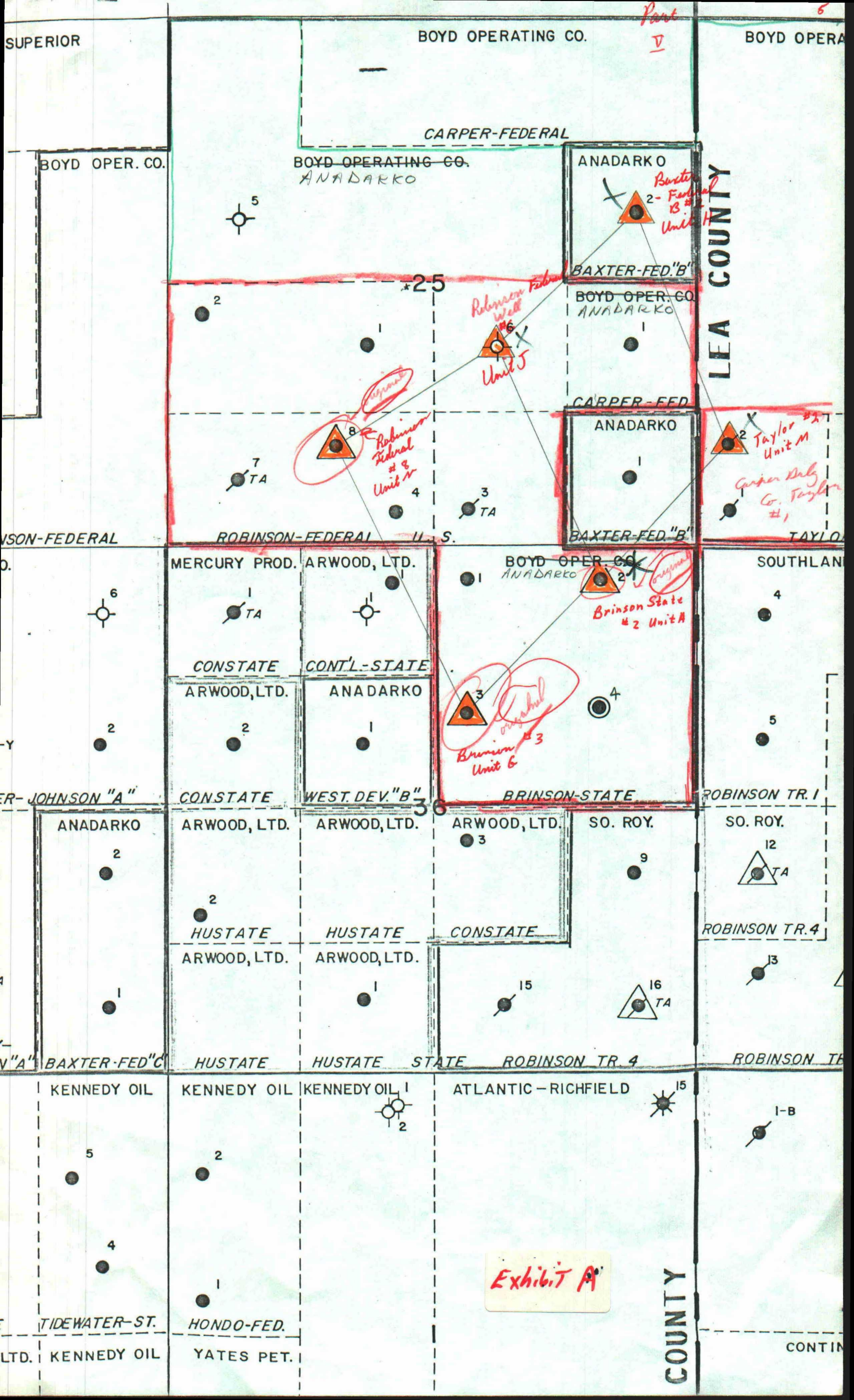
Section 30:

Unit M - Taylor #2 Well

Lea Co.

INDEX TO EXHIBITS

- Exhibit A - Map required by Paragraph V Form C-108
- Exhibit A-1 - OCD Order R-5318
- Exhibit B - Map of wells within 1/2 mile radius
- Exhibit B-1 - 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 - Data Sheet and Schematic of each on Injection Wells
- Exhibit F - Schematic of P & A wells within 1 mile
- Exhibit G - Water Quality from nearest fresh water wells
- Exhibit H - Water analysis of produced water
- Exhibit I - Documentation on Fracture Gradient
- Exhibit J - Statement per Paragraph XII of C-108
- Exhibit K - Notice Requirements



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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. 5787
Order No. R-5318

APPLICATION OF BOYD OPERATING COMPANY
FOR A WATERFLOOD PROJECT, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 13, 1976,
at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this 4th day of November, 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, Boyd Operating Company, seeks
authority to institute a waterflood project on its Robinson
and Brinson Leases, Grayburg-Jackson Pool, by the injection of
water into the Grayburg formation through its Robinson Well No.
8 located in Unit N of Section 25 and its Brinson Wells Nos. 2
and 3 located, respectively, in Units A and G of Section 36,
all in Township 16 South, Range 31 East, NMPM, Eddy 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 Robinson Well No. 6 in Unit J of said Section
25 and the Carper Drilling Company Taylor Well No. 1 in Unit M
of Section 30, Township 16 South, Range 32 East, NMPM, are two
plugged and abandoned wells which offset proposed injection wells
and are not plugged and abandoned in such a manner as to assure

EXH. B. 1
A-1

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Case No. 5787
Order No. R-5318

that they will not serve as channels for injected water to migrate from the Grayburg formation to other formations or the surface.

(6) That to prevent the migration of water from the Grayburg formation through said Robinson Well No. 6 and said Taylor Well No. 1, said wells should be recompleted as producing or injection wells in the Grayburg formation or replugged in accordance with Commission approved programs within one year after initiation of injection under pressure within the project.

(7) That the wells within the project should be equipped to facilitate periodic testing of the annular space between strings of production and surface casing.

(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 from injection, production, or plugged and abandoned wells.

(9) That an administrative procedure should be established whereby additional injection and producing wells at orthodox and unorthodox locations in the project area may be approved without notice and hearing.

(10) 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, Boyd Operating Company, is hereby authorized to institute a waterflood project on its Robinson, Brinson and Taylor Leases in Sections 25 and 36, Township 16 South, Range 31 East, and Section 30, Township 16 South, Range 32 East, NMPM, Grayburg-Jackson Pool, by the injection of water into the Grayburg formation through the following-described wells all in Township 16 South, Range 31 East, NMPM, Eddy County, New Mexico:

<u>LEASE NAME</u>	<u>WELL NO.</u>	<u>UNIT</u>	<u>SECTION</u>
Robinson	8	N	25
Brinson	2	A	36
Brinson	3	G	36

(2) That injection into each of said wells should be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; that the casing-tubing annulus of each injection well shall be tested for leaks, be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device, and that the injection wells or system shall be equipped in such a manner as to limit wellhead pressure to no more than 1050 psi.

(3) That the Secretary-Director of the Commission may administratively authorize a pressure limitation in excess of 1050 psi upon a showing by the operator that such higher pressure will not result in fracturing of the confining strata.

(4) That the wells within the project area shall be equipped with risers or in another acceptable manner such as to facilitate the periodic testing of the bradenhead for pressure or fluid production.

(5) That the operator shall immediately notify the supervisor of the appropriate Commission district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, the leakage of water or oil from any plugged and abandoned well within the project area or any other evidence of fluid migration from the injection zone, and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(6) That within one year after initiation of injection under pressure greater than hydrostatic pressure into injection wells within the project directly or diagonally offsetting the wells listed below, such wells must be recompleted as producing or injection wells or be replugged in accordance with a Commission approved program:

<u>LEASE</u>	<u>WELL NO.</u>	<u>UNIT</u>	<u>SECTION-TOWNSHIP-RANGE</u>
Robinson	6	J	25-16S-31E
Taylor	1	M	30-16S-32E

(7) That the subject waterflood project is hereby designated the Boyd Operating Company Robinson Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(8) 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.

(9) The Secretary-Director of the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of applicant's Robinson, Brinson, or Taylor leases in said Sections 25, 36, and 30 as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 330 feet to any lease line nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional production or injection wells shall include the following:

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Case No. 5787
Order No. R-5318

(a) A plat showing the location of proposed well, all wells within the project area, and offset operators, locating wells which offset the project area.

(b) A schematic drawing of the proposed well which fully describes the casing, tubing, perforated interval, depth, and a demonstration that any proposed injection well will meet construction, pressure, and monitoring provisions of Order (2), (3), and (4) of this Order or the equivalent.

(c) A letter stating that all offset operators to the proposed well have been furnished a complete copy of the application and the date of notification.


The Secretary-Director of the Commission may approve the proposed well if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

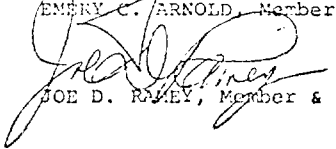
(10) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman


EMORY C. ARNOLD, Member


JOE D. RAVEY, Member & Secretary

S E A L

jr/

Midwest Inv. et al
Boyle Forms Inc.
A.W. Rutter, et al
4.1.31
42810

Amoco
Noy High-
tower, et al
10.1.82
16020

Amoco
10.1.82
16020

Noy Hightower,
et al
2.1.81
029492

Yates
2.1.85
38475

Water Flood Assoc.
(Cities Serv. D/R)
029492
HBP

(Cities Service D/R) Carper
Boyd Oper. Co.
013438
103065

Ken 056302
Johnson
3
Sery
3
A
3
Murphy
A
1
C
Anadarko
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1029438

(Exxon D/R)
103350
1029438

Carper
1029438

Gulf W. Mesa
H.B.P.
E.8560
40138

Se. Union
H.B.D.
E.8560
40138

Cal-Mom
H.B.P.
E.8560
40138

Water Flood Assoc.
(Cities Serv. D/R)
029492
Anadarko

(Cities Serv. D/R)
029492
Anadarko

Robinson
U.S.
"Fed"

Boyd Oper. Co.
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103065

West
B.T.A.
E.8560
40138

B.T.A.
E.8560
40138

Hustote
State
32051

Midronda Ener.
(J.M. Huber Corp.)
11-17-80
1313

Belcoq Pet.
10.1.86
10222

Notes Pet.
11.1.83
10222

Marolo
10.1.82
2187

Williams
10.1.82
2187

Aztec O.C.G.
10.1.82
2187

Reida
(Sale)
0969
0437592

Norman Caswell, (S)
U.S. M.I.
0969

Aztec
E.8233
1029438

Continental
H.B.P.
029406B

Tenneco Mobil
H.B.P.
E.8454

Costus
ARCO
HBP
E.8454

U.S. M.I.
N. Caswell, (S)
E.8160

Lee Orig
Sinc SF
E14541
TO4817
SA4200
DA12-15-59

U.S. M.I.
Norman Cas-
well, (S)
E.8160

Mobil
(B-11214)
HBP

Amoco
3.1.84
LG-1626
65E

Aztec
HBP
E.8233

Robinson Unit
SO. ROY (OPER)
Hudson
B-7180

Continental
H.B.P.
029406B

Amoco
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1/6/81

Memo

From
M. Stogner
RECEIVED

To Bill Gressett

JAN 8 1982

O. C. D.
ARTESIA, OFFICE

Here is Inadarko's WFX application
that I talked with you about over the phone
Wednesday. Brown State #2 is the well
with the questionable packer setting.

Thanks for checking this over.

Michael

Stogner

OK- Mike Williams

1-20-82

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date Spudded Completed		Depth TD PBTD		Zone(s)	Record of Completion: Perf(s) and Well Construction
Baxter "B" Federal #1 Operator: Anadarko Production Company	560' FSL & 660' FEL, Unit P, Sec. 25, T16S, R31E	Oil Producer	--	2-22-61	4065'	3988'	Metex Premier (Lovington covered w/ cmt (circulated). 5-1/2", 15.5# @ fill) 4065' w/225 sxs.	Perfs: 3757'-57'-63', 99'-3804', 88'-92' 3913'-17', (4034'-46', covered up). Casing: 8-5/8", 24# @ 325' w/225 sxs cmt (circulated). 5-1/2", 15.5# @ 4065' w/225 sxs.
Baxter "B" Federal #2 Operator: Anadarko Production Company	1980' FNL & 660' FEL, Unit H, Sec. 25, T16S, R31E	Oil Producer	3-9-61	3-30-61	4084'	4073'	Premier Lovington	Perfs: 3891'-96', 4024'-27'. Casing: 8-5/8", 24# @ 325' w/225 sxs, circ. 5-1/2", 15.5# @ 4084' w/250 sxs. Rotary Tool Drilled. Contractor: Vega Drlg. Co.
Brinson State #1 Operator: Anadarko Production Company	330' FNL & 2310' FEL, Unit B, Sec. 36, T16S, R31E	Oil Producer	6-20-38	9-15-38	4009'	4000'	Loco Hill Metex Premier Lovington	Perfs: 3599'-4000', Open hole. Casing: 12-1/2", 50# @ 33' w/20 sxs. 8-1/4", 32# @ 1070' w/30 sxs. 7", 20# @ 3599' w/35 sxs. Cable Tool Drilled. Contractor: Carper Drlg. Co.
Brinson State #2 Operator: Anadarko Production Company	330' FNL & 990' FEL, Unit A, Sec. 36, T16S, R31E	Water Injection	11-3-44	3-15-45	4232'	3972'	Premier	Perfs: 3856'-80'. Casing: 8-5/8" @ 964' w/50 sxs. 7" @ 3710' w/100 sxs. 4-1/2" liner from 3630' (on liner hanger) to 4008' w/ 200 sxs. 2-3/8" Salta lined tbg. @ 3570' w/Gulb. Uni-1 Pkr. Perfs: 3826'-3852'.
Brinson State #3 Operator: Anadarko Production Company	1650' FNL & 2310' FEL, Unit G, Sec. 36, T16S, R31E	Water Injection	2-26-49	5-13-49	4020'	3941'	Premier	Casing: 8-5/8" @ 1015' w/50 sxs. 7" @ 3640' w/100 sxs. 4-1/2" liner from 3580' to 3945' w/175 sxs. 2-3/8" plas- tic coated tbg. Set to 3801' w/pkr. TOC on liner @ 3650'. Cable Tool Drilled. Contractor: R. L. Harrison

Exhibit
B-1

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date Spudded Completed		Depth TD PBD		Zone(s)	Record of Completion: Perf(s) and Well Construction
Brinson State #4 Operator: Anadarko Production Company	1650'FNL & 990'FEL, Unit H, Sec.36, T16S, R31E	Oil Producer	5-7-81	8-14-81	4028'	4010'	Premier	Perfs: 3843'-44', 61'-66', 72'-82', & 3885'. Casing: 8-5/8" @ 457' w/300 sxs (circ), 5-1/2", 15.5# @ 4027' w/750 sxs. (TOC @ 2000'.) Rotary Tool Drilled Contractor: Warton Drilling Co.
Carper Federal #1 Operator: Anadarko Production Company	1980'FSL & 660'FEL, Unit I, Sec.25, T16S, R31E	Oil Producer	5-14-51	9-5-51	4212'	4125'	Metex Premier Lovington	Perfs: 3748'-4125', OH. Casing: 8-5/8" @ 1058' w/50 sxs. 7" @ 3748' w/100 sxs. Cable Tool Drilled Contractor: Carper Drilling Co.
Robinson #1 Operator: Anadarko Production Company	1980'FSL & 1980'FWL, Unit K, Sec.25, T16S, R31E	Oil Producer	1926 (Recompletion:8-1-77)	--	3885' deepened to 3925'	3925'	Metex Premier Lovington	Perfs: 3715'-3925', OH. Casing: 15-1/2" @ 415', 12-1/2" @ 941', 10" # 2133', 8-1/4" @ 3302', 6-5/8" @ 3715'. Records do not show which of this was left in hole, nor the amounts of cement used. Cable Tool Drilled.
Robinson #2 Operator: Anadarko Production Company	2310'FSL & 320'FWL, Unit L, Sec.25, T16S, R31E	Oil Producer	1927	--	4100'	4025'	Metex Premier Lovington	Perfs: 3692'-4025', OH. Casing: 15-1/2" @ 410', 12-1/2" @ 915', 10" @ 2295', 8-1/4" @ 3692' w/200 sxs No records to show which was pulled. Cable Tool Drilled.
Robinson #3 Operator: Anadarko Production Company	330'FSL & 2310'FEL, Unit O, Sec.25, T16S, R31E	Oil Producer	9-23-38	1-1-39	4040'	4040'	Loco Hille Metex Premier Lovington	Perfs: 3619'-4040', OH. Casing: 8-1/4" @ 1097' w/50 sxs. 7" @ 3619' w/100 sxs. Cable Tool Drilled Contractor: Carper Drilling Co.

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date Spudded Completed		Depth TD PBTD		Zone(s)	Record of Completion: Perf(s) and Well Construction
Robinson #4 Operator: Anadarko Production Company	330' FSL & 2970' FEL, Unit N, Sec. 25, T16S, R31E	Oil Producer	--	9-7-39	4025'	4015'	Loco Hills Metex Premier Lovington	Perfs: 3600'-4015', OH. Casing: 8-1/4" @ 927' w/50 sxs. 7" @ 3600' w/100 sxs. 5-1/2" slotted liner from 3565' to 3868'. 185' of 5" liner fell to bottom of hole. Can't fish out. Cable Tool Drilled.
Robinson #7 Operator: Anadarko Production Company	660' FSL & FWL, Unit M, Sec. 25, T16S, R31E	Oil Producer	4-23-55	9-9-55	3987'	3987'	Metex Premier Lovington	Perfs: 3666'-3987', OH. Casing: 8-5/8" @ 966' w/50 sxs. 5-1/2" @ 3666' w/100 sxs. Jars lost in hole. Cable Tool Drilled Contractor: Carper Drilling Co.
Robinson #8 Operator: Anadarko Production Company	990' FSL & 1650' FWL, Unit N, Sec. 25, T16S, R31E	Water Injector	8-3-75 (Recompletion as Injector: 3-3-77)	8-24-75	4050'	4043'	Premier	Perfs: 3838'-40', 58', 64', 66'-68', (3992'-96', 4000'-4006', sqzd). Casing: 8-5/8" @ 450' w/175 sxs. 4-1/2" @ 4050' w/335 sxs. 2-3/8" plastic lined tbg. @ 3791' w/ 4-1/2" Uni-1 Pkr. CIBP @ 3980' w/11' cmt. on top. Rotary Tool Drilled. Contractor: WEK Drilling Co.
Taylor #1 Operator: Anadarko Production Company	330' FSL & FWL, Unit M, Sec. 30, T16S, R32E	P&A	-- (P&A in 1947)	6-14-39	4055'	4015'	--	Perfs: 3605'-4015', OH. Casing: 12-1/2" @ 310', 10" @ 605, 8-5/8" @ 1095' w/35 sxs, 7" @ 3605' w/15 sxs. On P&A, pulled 1950' of 7" & set 10 sxs cmt plugs @ 3700', 2250' & 1095'. Cable Tool Drilled.

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date Spudded Completed		Depth TD PBD		Zone(s)	Record of Completion: Perf(s) and Well Construction
Taylor #2 Operator: Anadarko Production Company	990' FSL & 330' FWL, Unit M, Sec. 30, T16S, R32E	Oil Producer	9-13-55	11-23-55	4017'	4017'	Premier Lovington	Perfs: 3862'-4017', OH. Casing: 8-5/8" @ 1225' w/50 sxs. 7" @ 3862' w/100 sxs. Cable Tool Drilled Contractor: Carper Drilling Co.
Taylor #3 Operator: Anadarko Production Company	330' FSL & 1585' FWL, Unit N, Sec. 30, T16S, R32E	Oil Producer	11-1-59	1-13-60	4032'	4025'	Metex Premier Lovington	Perfs: 3744'-50', 54'-56', 76'-86', 3842'-52', 3962'-77'. Casing: 8-5/8" @ 945' w/50 sxs. 5-1/2" @ 4030' w/100 sxs. Cable Tool Drilled. Contractor: Carper Drilling Co.
Western Development "B" #1 Operator: Anadarko Production Company	1980' FNL & 1980' FWL, Unit F, Sec. 36, T16S, R31E	Oil Producer	10-11-61	10-22-61	3986'	3968'	Metex Premier Lovington	Perfs: 3746'-51', 86'-88', 3806'-14', 3826'-38', 3951'-57'. Casing 8-5/8" @ 364' w/200 sxs (circulated). 5-1/2" @ 3986' w/ 250 sxs.
Continental-State #1 Operator: Hancock Oil Co.	660' FNL & 1980' FWL, Unit C, Sec. 36, T16S, R31E	Dry Hole, P&A	5-12-55 (P&A in 1955)	8-6-55	4085'	3912'	--	Perfs: 3796'-3851', 3966'-78', 4046'- 68'. Casing: 8-5/8" @ 926' w/250 sxs. 5-1/2" @ 4083' w/175 sxs. For P&A, pulled 5-1/2" from 2878'. Plugged (w/20 sxs each): 4085', 2250', 1075'. Spotted 10 sxs @ top.

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date Spudded Completed		Depth TD PBD		Zone(s)	Record of Completion: Perf(s) and Well Construction
Constate #1 Operator: Mercury Prod. Co.	660' FNL & FWL, Unit D, Sec. 36, T16S, R31E	Oil Producer	9-21-65	10-14-65	3995'	3992'	Queen Loco Hills Metex Premier Lovington	Perfs: 3339'-42', 3381'-83', 3684'-85', 3734'-37', 3777'-81', 3812'-34', 3950'- 54'. Casing: 13-3/8" @ 30' w/3 yds cmt., 4-1/2" @ 3994' w/300 sxs cmt. 100 sxs behind csng to 1000'.
Constate #1 Operator: Arwood LTD.	330' FNL & 2310' FWL, Unit C, Sec. 36, T16S, R31E	Oil Producer	6-8-61	7-20-61	4036'	4014'	Metex Premier Lovington	Perfs: 3727'-32', 3822'-25', 42'-73', 91'-92', 3985'-4001'. Casing: 8-5/8" @ 385' w/175 sxs. 5-1/2" @ 4036' w/250 sxs.
Constate #2 Operator: Arwood LTD.	1980' FNL & 660' FWL, Unit E, Sec. 36, T16S, R31E	Oil Producer	8-14-61	9-22-61	3975'	3898'	Metex Premier Lovington	Perfs: 3724'-27', 66'-72', 3942'-51'. Casing: 8-5/8" @ 419' w/150 sxs. 5-1/2" @ 3975' w/200 sxs.
Constate #3 Operator: Arwood LTD.	2310' FSL & FEL, Unit J, Sec. 36, T16S, R31E	Oil Producer	11-16-61	12-22-61	3977'	3950'	Metex Premier Lovington	Perfs: 3784'-90', 3825'-29', 3988'-45'. Casing: 8-5/8" @ 394' w/150 sxs. 5-1/2" @ 3977' w/200 sxs.
State RC #2 Operator: Southland Royalty	1980' FSL & 660' FEL, Unit I, Sec. 36, T16S, R31E	Oil Producer	9-30-59	10-30-59	4024'	4010'	Queen	Perfs: 3114'-38', 3776'-3858', 3967'- 83'. Casing: 8-5/8" @ 332' w/250 sxs. 4-1/2" @ 4023' w/200 sxs. CIBP @ 3700' w/35' cmt on top. TOC @ 2720' from temp. survey.

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date Spudded Completed	Depth TD PBTd	Zone(s)	Record of Completion: Perf(s) and Well Construction
Robinson #5 Operator: Carper Drlg. Co.	1980' FNL & 660' FWL, Unit E, Sec. 25, T16S, R31E	Dry Hole P&A	1-25-51 5-1-51 (P&A in 1951)	4681' --	--	Perfs: None. Casing: 8-5/8" @ 1007' w/50 sxs. 7" @ 3705' w/100 sxs. On P&A, 7" cut & pulled from 2868'. Plugs: 4600' w/20 sxs, 2870' w/10 sxs 8-5/8" X 4" on top of csng.
Robinson #6 Operator: Carper Drlg. Co.	1920' FSL & 2070' FEL, Unit J, Sec. 25, T16S, R31E	Dry Hole P&A	9-1-51 11-10-51 (P&A on 11-15-51)	4058' --	--	Perfs: None. Casing: 8-5/8" @ 1048' w/50 sxs. 7" @ 3769' never cmtd. On P&A, 7" pulled 8-5/8" cut @ 380' & pulled. Plugs: 3235' w/15 sxs, 2138' w/10 sxs 1065' w/10 sxs, Top w/10 sxs.
Robinson #3 Operator: Southland Royalty	990' FNL & 1730' FWL, Unit C, Sec. 31, T16S, R32E	Oil Producer	8-18-59 8-31-59	4080' 4046'	Premier Lovington	Perfs: 3814'-20', 47'-61', 63'-78', 83'-93', 4000'-4010'. Casing: 8-5/8" @ 360' w/275 sxs, 4-1/2" @ 4080' w/200 sxs. TOC @ 3023' from logs.
Robinson #4 Operator: Southland Royalty	660' FNL & FWL, Unit D, Sec. 31, T16S, R32E	Oil Producer	8-3-59 8-13-59	4074' 4038' Deepened to 4320'	Premier Lovington	Perfs: 3814'-89', 3998'-4010'. (4076'-4200', OH on recompletion). Casing: 8-5/8" @ 360' w/275 sxs. 4-1/2" @ 4076' w/200 sxs. CIBP @ 4200'.
Robinson #5 Operator: Southland Royalty	1980' FNL & 660' FWL, Unit E, Sec. 31, T16S, R32E	Oil Producer	6-9-59 7-27-59 (Recompletion to Deepen in 1/72)	4098' -- Deepened to 4230'	Premier Lovington	Perfs: 3796'-3871', 3984'-96'. Casing: 8-5/8" @ 350' w/200 sxs. 5-1/2" @ 4098' w/200 sxs. Deepened to 4230', was dry, set CIBP @ 4080'.

Well Name, Number Operator	Location: Unit, Sec., Twp., Range	Type	Date Spudded Completed	Depth TD PBD	Zone(s)	Record of Completion: Perf(s) and Well Construction
Robinson #15 Operator: Southland Royalty	330'FSL & 2310'FEL, Unit O, Sec.30, T16S, R32E	Oil Producer	8-23-59 9-2-59	4090' 4060'	Premier Lovington	Perfs: 3824'-3920', 4032'-47'. Casing: 8-5/8" @ 330' w/250 sxs. 4-1/2" @ 4090' w/200 sxs.

ANADARKO PRODUCTION COMPANY

Exhibit C

Boyd-Robinson Waterflood
Eddy 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 150 BWIPD per injector
Maximum daily rate of 250 BWIPD per injector

2. System is closed.

3. Proposed average and maximum injection pressure:

Average injection pressure: 2400 psi
Maximum injection pressure: 2400 psi

The maximum injection pressure requested is 2400 psi which is 0.6 psi per foot. The estimated frac pressure in this area is 3500 psi based on the instantaneous shut-in pressure while treating the recently drilled Brinson State #4 (Section 36, Township 16 South, Range 31 East). See Exhibit I attached.

4. (a) Source of injection fluid:

Produced water and purchased fresh water

- (b) Analysis of formation fluid:

Attached as Exhibit H

5. Zone of disposal is productive of oil and gas within one mile of the proposed disposal well.
6. There is no stimulation program planned

ANADARKO PRODUCTION COMPANY

Exhibit D

Boyd-Robinson Waterflood
Eddy County, New Mexico

GEOLOGICAL DATA

1. Geologic name of injection zone: The injection zone will be the Premier sand, which lies in the bottom the Grayburg formation.
2. Lithologic detail of injection zone: The Premier sand is a radioactive sandstone interbedded with some sandy carbinates. (See coring information attached for further details).
3. Thickness of injection zone:
 - a) Average thickness - 43 feet.
 - b) Range of thickness - 35 feet to 50 feet
4. Depth to injection zone:
 - a) Average depth - 3850 feet
 - b) Range of depth - 3820 feet to 3880 feet
5. Geologic name and depth to bottom of all underground sources of drinking water (TDS of 10,000 mg/l or less) overlying or immediately under injection zone: Santa Rosa from 11' to 230', Rustler from 230' to 470'. Sampled fresh water well is of unknown depth but thought to be about 200' deep. This is probably accurate because analysis indicates very good water, too good to be Rustler.

Ref: Para III-C-108

ANADARKO PRODUCTION COMPANY

Exhibit E-1

Boyc-Robinson Waterflood
Eddy County, New Mexico

WELL DATA ON INJECTION WELLS

Log: n/a

A(1) Injection Well: Taylor #2
990 feet from South line and 330 feet from West line
Section 30, Township 16 South, Range 32 East
Rev Eddy County, New Mexico

A(2) Casing Strings:

1. 8 5/8" casing set 1225 feet cemented with 50 sacks
TOC at 935 feet calculated.
2. 7", or 20# casing set 3862 feet with 100 sacks of
cement circulated to 3212 feet.
3. Annulus filled with treated fluid and Bradenhead
equipped to detect leakage or pressure

A(3) Tubing: 2 3/8", 8rd, 4.7# EUE lined tubing

A(4) Packer: 7" Guiberson Uni-I packer set at 3812 feet

B(1) Injection formation is the Premier Sand of the Grayburg

B(2) Injection interval 3864 to 3900 feet open hole

B(3) Drilled for injection

PROPOSED W.I.W. COMPLETION

TAYLOR #2

Location: 990'FSL & 330'FWL,
Sec.30, T16S, R32E

150± barrels per day of produced
fresh water mixture injected at
an estimated pressure of 2400
psig.

8-5/8" casing set @ 1225' and
cemented with 50 sacks (TOC @
935', calculated).

7", 20# casing set @ 3862'
and cemented with 100 sacks
(TOC @ 3212', calculated).

2-3/8", 8rd, 4.7# eue
Salta Lined Tubing.

Treated fluid in annulus.

Top Grayburg @ 3589'.

7" Guiberson Uni-I, Packer set
@ 3812'

Injection Interval:
3864'-3900'

Plug back with hydromite to
approximately 3930'.

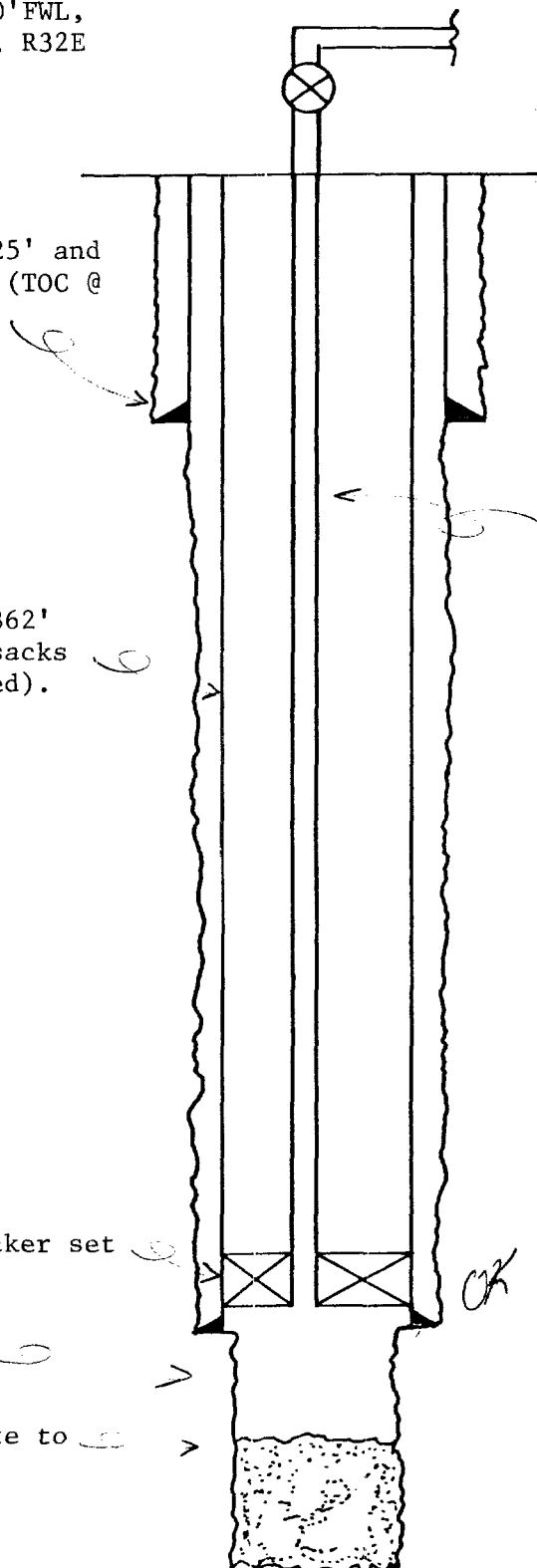
Top Premier @ 3864'.

Top San Andres @ 3900'.

Top Lovington @ 3998'.

T.D. 4017'

6-1/4" O.H.



Ref: Para III-C-108

ANADARKO PRODUCTION COMPANY

EXHIBIT E-2

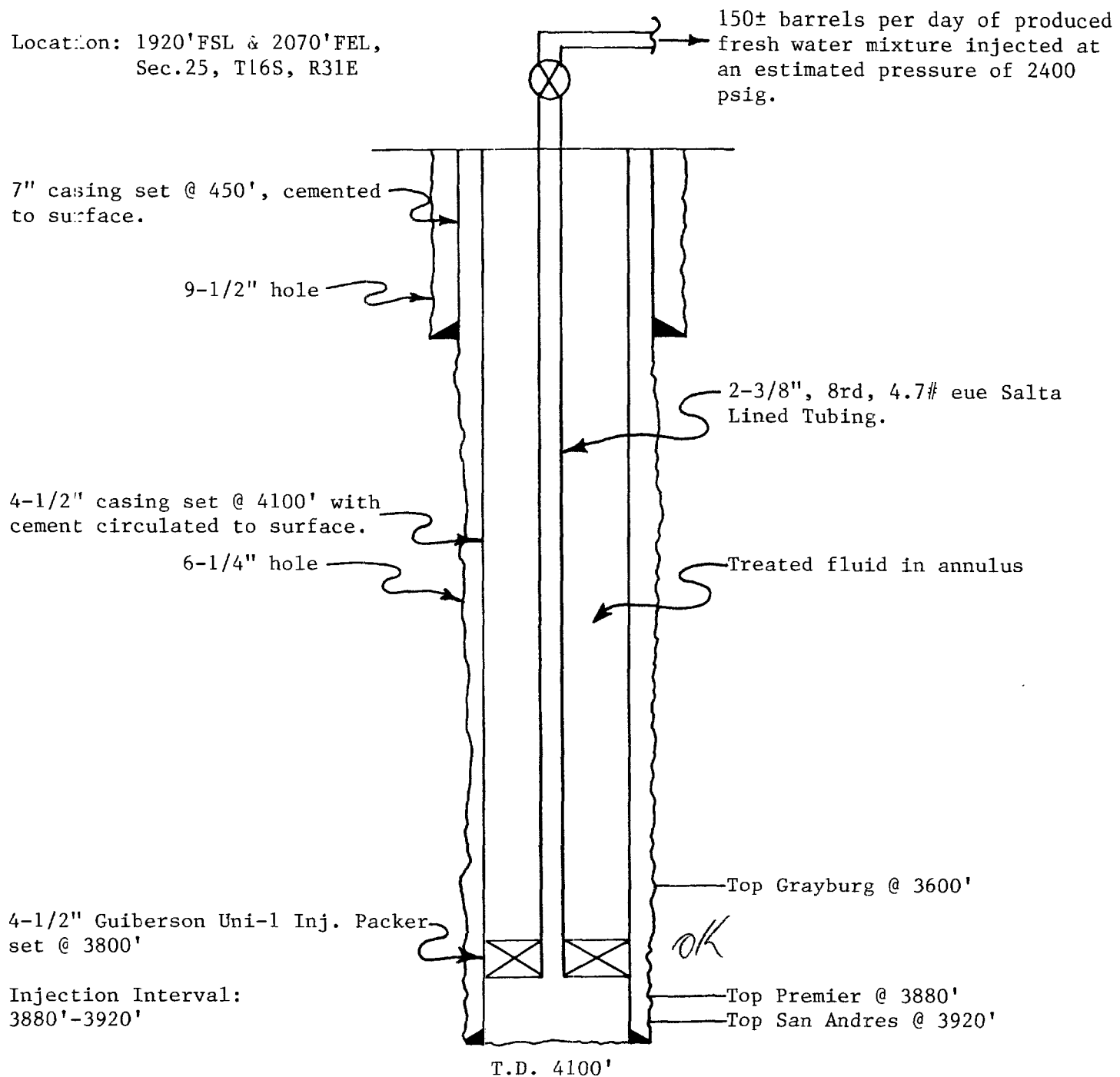
Boyd-Robinson Waterflood
Eddy County, New Mexico

WELL DATA ON INJECTION WELLS

Log: n/a

- A(1) Robinson #6
1920 feet from South line and 2070 feet from East line
Section 25, Township 16 South, Range 31 East
Eddy County, New Mexico
- A(2) Casing Strings:
1. 7" casing set 450 feet cemented to surface
 2. 4 1/2" casing set 4100 feet with cement circulated to surface.
 3. Annulus filled with treated fluid and Bradenhead equipped to detect leakage or pressure
- A(3) Tubing: 2 3/8", 8rd, 4.7# EUE lined tubing
- A(4) Packer: 4 1/2" Guiberson Uni-I Packer set at 3800 feet
- B(1) Injection formation is the Premier Sand of the Grayburg
- B(2) Injection interval: 3880 feet to 3920 feet open hole
- B(3) Drilled for injection

Location: 1920'FSL & 2070'FEL,
Sec.25, T16S, R31E



Ref; Para III-C-108

ANADARKO PRODUCTION COMPANY

Exhibit E-3

Boyd-Robinson Waterflood
Eddy County, New Mexico

WELL DATA ON INJECTION WELLS

Log: n/a

A(1) Injection Well: Baxter-Federal B #2
1980 feet from North line and 660 feet from East line
Section 25, Township 16 South, Range 31 East
Eddy County, New Mexico

A(2) Casing Strings:

1. 8 5/8" casing set 325 feet cemented with 225 sacks
circulated to surface
2. 5 1/2" casing set 4084 feet with 200 sacks of cement
circulated to 2584 feet.
3. Annulus filled with treated fluid and Bradenhead
equipped to detect leakage or pressure

A(3) Tubing: 2 3/8", 8rd, 4.7# EUE lined tubing

A(4) Packer: 5 1/2" Guiberson Uni-I Packer set at 3850 feet

B(1) Injection formation is the Premier Sand of the Grayburg

B(2) Injection interval 3891 feet to 3896 feet open hole

B(3) Drilled for production

B(4) CIBP at 4000 feet with 35 feet cement on top to block
Lovington perms at 4024 feet to 4027 feet.

Baxter-Federal "B" #2

Location: 1980'FNL & 660'FEL,
Sec.25, T16S, R31E

150± barrels per day of produced
fresh water mixture injected at
an estimated pressure of 2400
psig.

8-5/8", 24# casing set @
325' and cemented with 225
sacks (circulated).

7-7/8" hole size.

5-1/2", 15.5# casing set @
4084' with 200 sacks (TOC
@ 2584', calculated).

Top salt @ 1090'

2-3/8", 8rd., 4.7# eue
Salta Lined Tubing

Base salt @ 2090'

Treated fluid in annulus

Top Grayburg @ 3594'

5-1/2" Guiberson Uni-I, Packer
set @ 3850.

OK Top Premier @ 3876'

Premier perms: 3891'-96'
(Injection Interval).

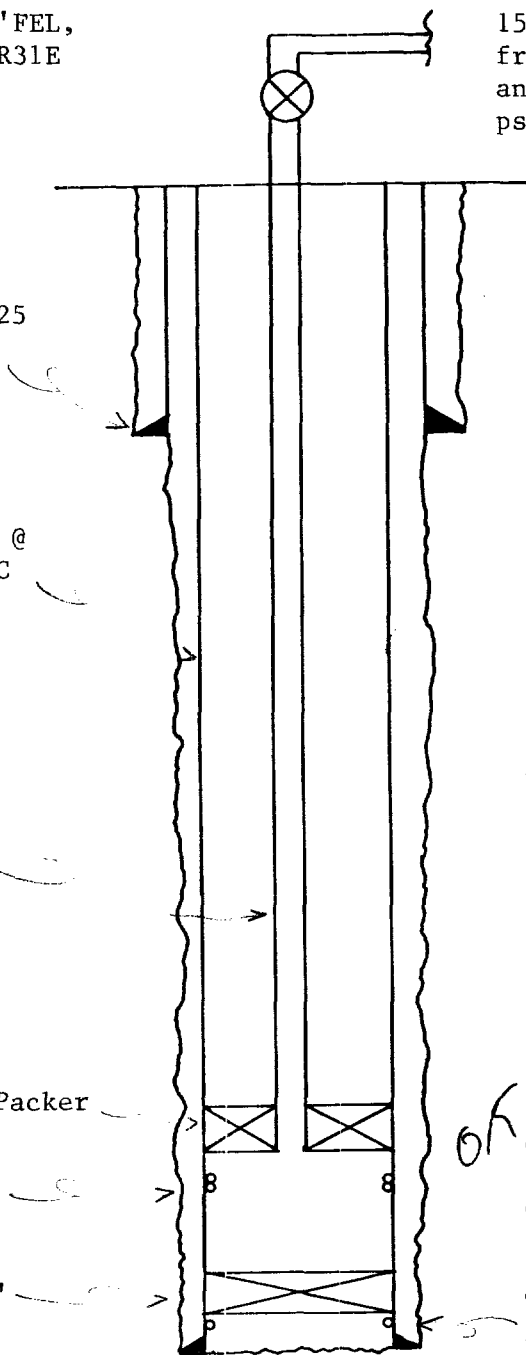
Top San Andres @ 3913'

CIBP set @ 4000' with 35'
of cement on top.

Top Lovington @ 4022'

Perfs: 4024'-27'

T.D. 4084'



Ref: Para III-C-108

ANADARKO PRODUCTION COMPANY

Exhibit E-4

Boyd-Robinson Waterflood
Eddy County, New Mexico

*Packer is
286' above perforations*

WELL DATA ON INJECTION WELLS

Log: n/a

A(1) Injection Well: Brinson State #2
330 feet from North line and 990 feet from East line
Section 36, Township 16 South, Range 31 East
Eddy County, New Mexico

A(2) Casing Strings:

1. 8 5/8" casing set 964 feet cemented with 50 sacks
TOC at 675 feet calculated.
2. 7" casing set 3640 feet with 100 sacks of cement
circulated to 2840 feet.
3. 4 1/2" liner set at 4008 feet with 200 sacks cement.
4. Annulus filled with treated fluid and Bradenhead
equipped to detect leakage or pressure

A(3) Tubing: 2 3/8" lined tubing

A(4) Packer: 7" Guiberson Uni-I packer set at 3570 feet

B(1) Injection formation is the Premier Sand of the Grayburg

B(2) Injection interval through perforations 3856 feet at
3880 feet.

B(3) Drilled for injection

BRINSON STATE #2

Location: 330' FNL & 990' FEL,
Sec. 36, T16S, R31E

150± barrels per day of produced
fresh water mixture injected
an estimated pressure of 2400
psig.

8-5/8" casing set @ 964' w/50
sacks cement, (TOC @ 675',
calculated).

Treated Fluid in annulus

7" casing set @ 3640' w/100
sacks cement, (TOC @ 2840',
calculated).

2-3/8" Salta Lined Tubing

7" Guiberson Uni-I Packer
@ 3570'.

Brown Oil Tool Liner
Hanger @ 3630'.

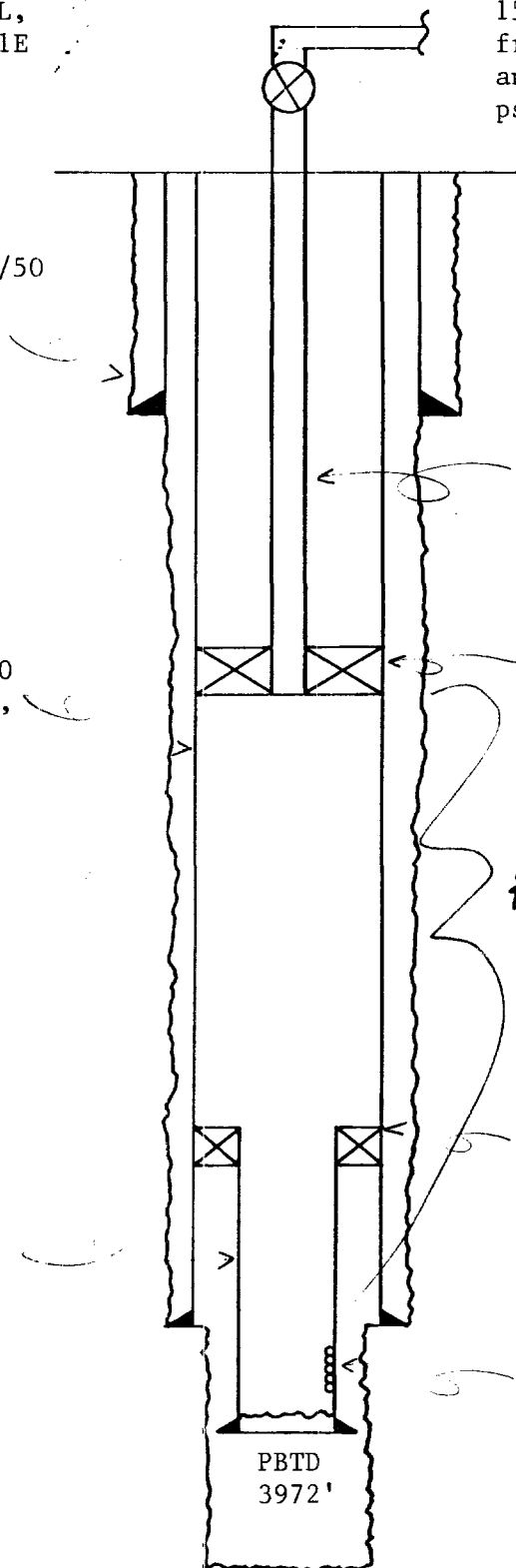
4-1/2" liner @ 4008' w/200
sacks.

Premier perfs:
3856'-3880'.

PBTD
3972'

T.D. 4232'

286'
3856
3570
286



Ref: Para III-C-108

ANADARKO PRODUCTION COMPANY

Exhibit E-5

Boyd-Robinson Waterflood
Eddy County, New Mexico

WELL DATA ON INJECTIONS WELLS

Log: n/a

- north*
- A(1) Injection Well: Brinson State #3
1650 feet from ~~West~~ line and 2310 feet from East line
Section 36, Township 16 South, Range 31 East
Eddy County, New Mexico
- A(2) Casing Strings:
1. 8 5/8" casing set 1015 feet with 50 sacks
TOC at 725 feet calculated.
 2. 7" casing set 3640 feet with 100 sacks of cement
circulated to 2840 feet.
 3. 4 1/2" liner set at 3945 feet with 175 sacks of cement
to 3650 feet TOC.
 4. Annulus filled with treated fluid and Bradenhead
equipped to detect leakage or pressure
- A(3) Tubing: 2 3/8" lined tubing
- A(4) Packer: 4 1/2" Guiberson Uni-I packer set at 3801 feet
- B(1) Injection formation is the Premier Sand of the Grayburg
- B(2) Injection interval through perforations 3826 feet to 3852
feet
- B(3) Drilled for injection

T.D. 4020'

Ref: Para III-C-108

ANADARKO PRODUCTION COMPANY

Exhibit E-6

Boyd-Robinson Waterflood
Eddy County, New Mexico

WELL DATA ON INJECTION WELLS

Log: n/a

A(1) Injection Well: Robinson #8
1650 feet from West line and 990 feet from South line
Section 25, Township 16 South, Range 31 East
Eddy County, New Mexico

A(2) Casing Strings:

1. 8 1/5" casing set 450 feet cemented with 175 sacks to surface.
2. 4 1/2" casing set 4050 feet with 335 sacks of cement TOC at 3180 feet.
3. Annulus filled with treated fluid and Bradenhead equipped to detect leakage or pressure.

A(3) Tubing: 2 3/8" lined tubing

A(4) Packer: 4 1/2" Guiberson Uni-I Packer set at 3812 feet

B(1) Injection formation is the Premier Sand of the Grayburg

B(2) Injection interval through perforations 3838 feet to 3840 feet, 3858 feet to 3864 feet, 3866 feet to 3868 feet.

B(3) Drilled for production

B(4) Lovington Interval perfs: 3992-96; 4000-4006.
11 foot cement bridge plug set at 3980 feet.

ROBINSON #8

Location: 1650'FWL & 990'FSL,
Sec.25, T16S, R31E

150± barrels per day of produced
fresh water mixture injected
an estimated pressure of 2400
psig.

8-5/8" casing set @ 450' w/
175 sacks cement, (to surface).

Treated fluid in annulus.

4-1/2" casing set @ 4050' w/
335 sacks cement, (TOC @ 3180'
calculated).

121 jts 2-3/8" Salta lined
tubing @ 3791' w/Guiberson
Uni-I, 4-1/2" packer.

Premier perfs: 3838'-40',
58'-64', 3866'-68'.

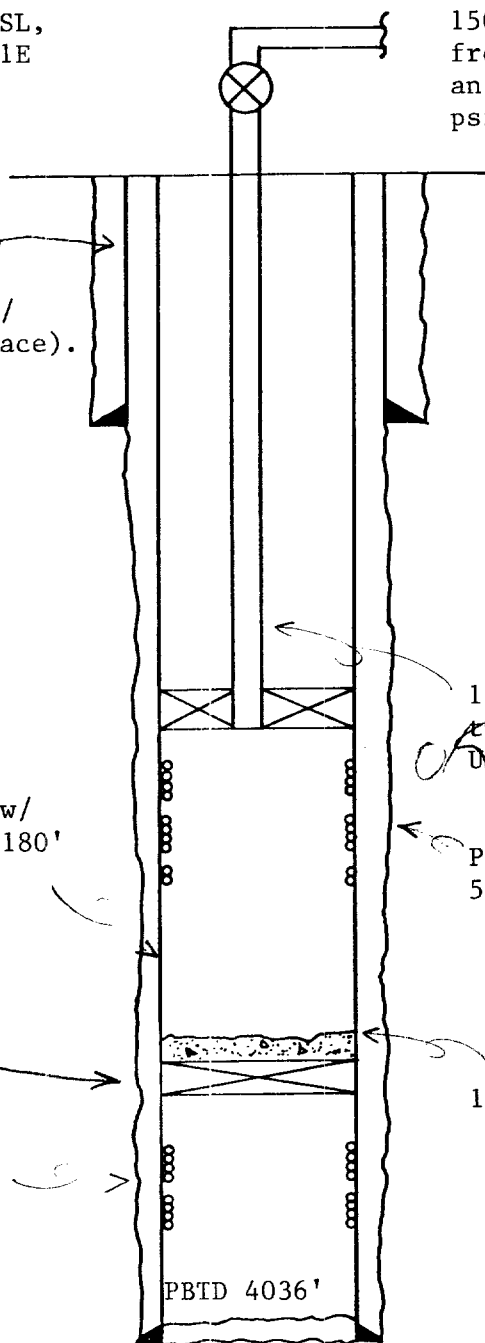
CIBP @ 3980'.

11' cement on top of plug.

Lovington Interval perfs:
3992'-96', 4000'-4006'.

PBTD 4036'

T.D. 4050'



P&A as of 1951

Well Name & Number:
Robinson #5

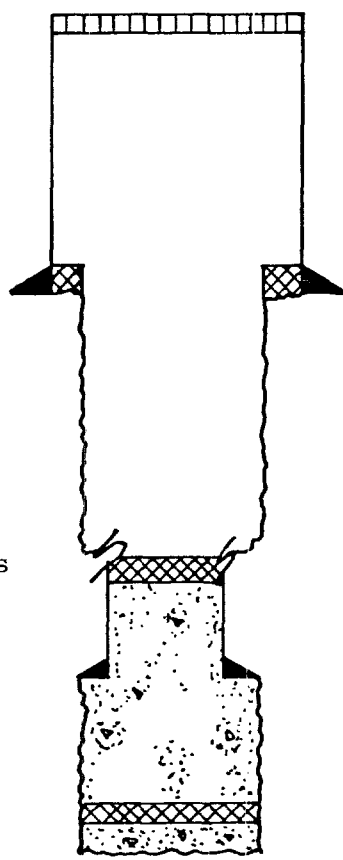
Location:
1980' FNL & 660' FWL, Unit E,
Sec. 25, T16S, R31E

8-5/8" x 4" swedge on
top of casing

10 sacks @ 1000' behind
shoe

Plugged @ 2870' w/10 sacks
cement

Plugged @ 4600' w/20 sxs
of cement



T.D. 4681'

8-5/8" casing cement w/50 sacks
@ 1007'

7" casing cut and pulled from
2868'

7" casing cemented w/100 sxs @
3705'.

Perfs:
None

NOTES: Completed April 30, 1951;
P&A soon after, in 1951.
Operator was Carper Drlg. Co.

Exhibit F

P&A as of September 4, 1955

Well Name & Number:

Continental-State #1

Location:

660' FNL & 1980' FWL, Unit C,
Sec. 36, T16S, R31E

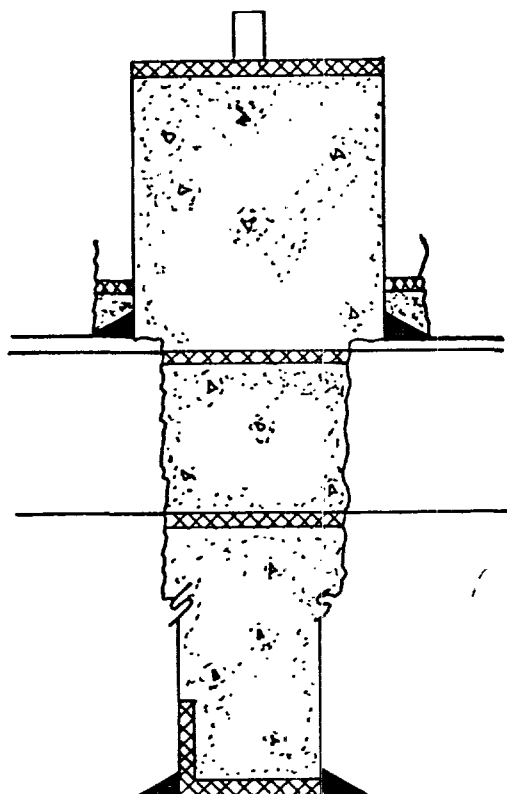
Spotted 10 sxs cement @ surface

TOC: @ 880'

T/Anhydrite @ 927'

T/Salt @ 1075'

B/Salt @ 2250'



8-5/8" casing @ 926' w/250 sxs

20 sxs cement @ salt top

20 sxs cement @ salt base

Recovered 5-1/2" csng above
2878'

5-1/2" casing @ 4083' w/175
sxs cement

Plug w/20 sxs @ 4085'

NOTES: Operator was Hancock Oil Co.

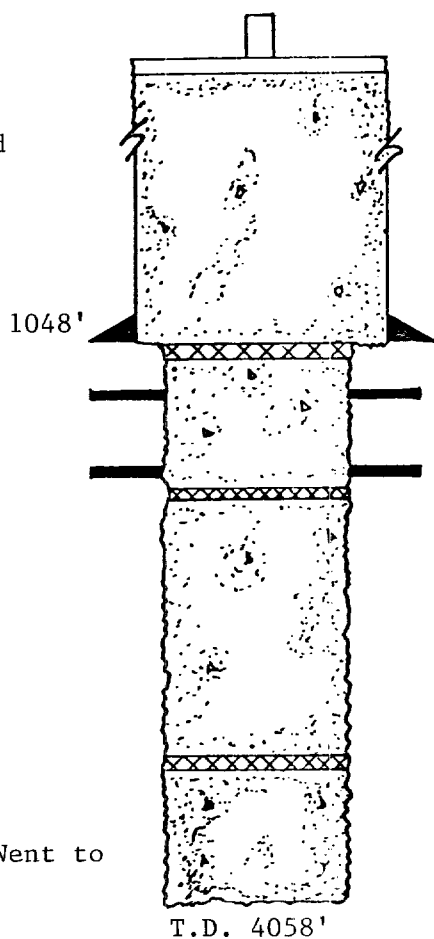
Perfs: 3796'-3851'
3966'-3978'
4046'-4068'
Squeezed

P&A as of November 15, 1951

Well Name & Number:
Robinson #6

Location:
1920' FSL & 2070' FEL, Unit J,
Sec. 25, T16S, R31E

8-5/8" casing pulled
from 330'



7" casing pulled. Went to
3769'
(Never Cemented)

Plugged @ Top w/10 sxs cement

8-5/8" csng @ 1048' w/50 sxs cmt.

Plugged w/10 sxs cmt @ 1065'

Plugged w/10 sxs cmt @ 2138'

Plugged w/15 sxs cmt @ 3235'

Perfs:
None

NOTES: Was operated by Carper Drlg. Co.
Recently purchased by Anadarko
Production Company.

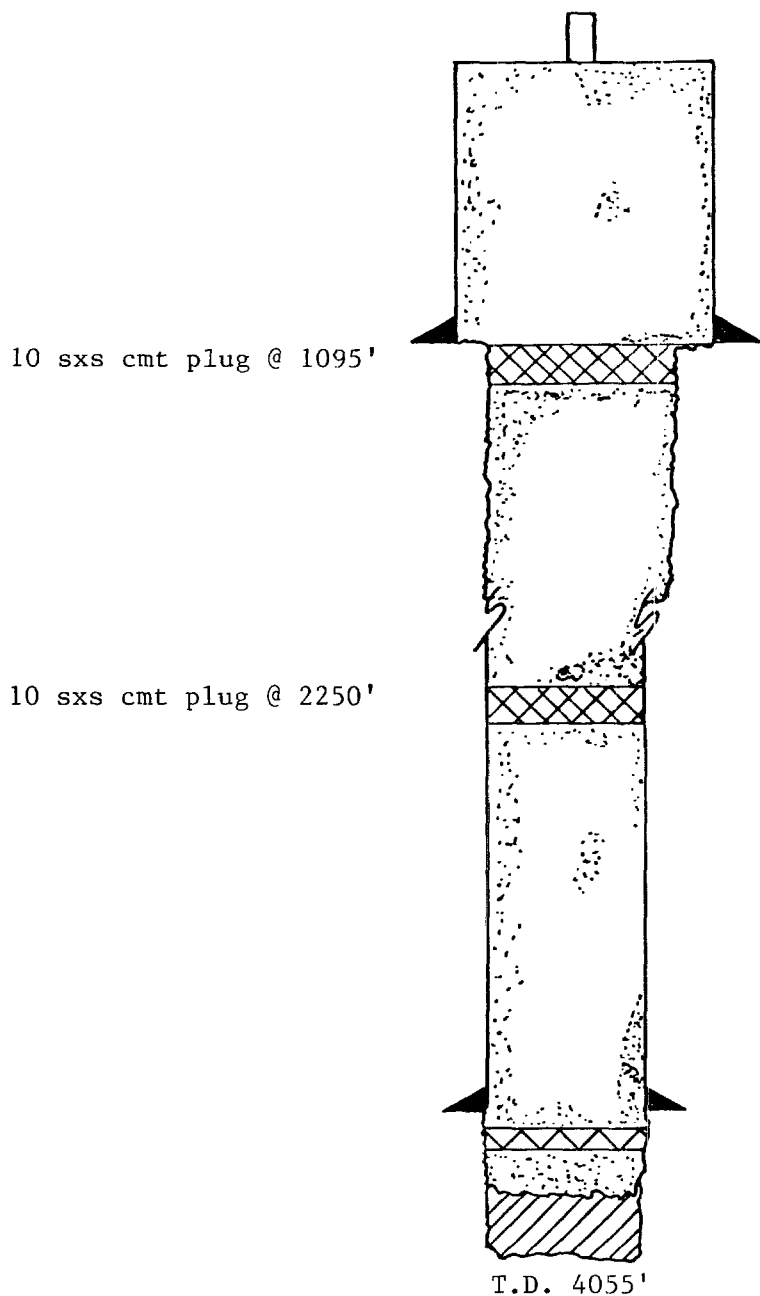
P&A as of June, 1947

Well Name & Number:

Taylor #1

Location:

330' FSL & FWL, Unit M,
Sec. 30, T16S, R32E



8-5/8" casing @ 1095' cemented
w/35 sxs

Hole size: 8-1/2"

Recovered 1950' of 7" casing

7" @ 3605' cemented w/15 sxs cmt
Put cmt plug @ 3700'

Fill to 4015'

Perfs:
None

NOTES: Was operated by Carper Drlg Co..
Recently purchased By Anadarko
Production Company.

**P. O. BOX 1468
MONAHANS, TEXAS 79756
PHONE 943-3234 OR 563-1040**

Martin Water Laboratories, Inc.

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

RESULT OF WATER ANALYSES

TO: Mr. Daniel Kernaghan
P.O. Box 2497, Midland, Texas

LABORATORY NO. 1081251
SAMPLE RECEIVED 10-26-81
RESULTS REPORTED 10-26-81

COMPANY Anadarko Production Company LEASE _____

FIELD OR POOL _____

SECTION 23 BLOCK SURVEY T 16 S COUNTY Eddy STATE NM

SOURCE OF SAMPLE AND DATE TAKEN: R 31 E

NO. 1 Raw water - taken from windmill located in SE/4 of SE/4 of Section 23. 10-22-81

NO. 2 _____

NO. 3

NO. 4

REMARKS: Sampled by Mike Braswell

CHEMICAL AND PHYSICAL PROPERTIES					
	NO. 1	NO. 2	NO. 3	NO. 4	
Specific Gravity at 60° F.	1.0027				
pH When Sampled					
pH When Received	7.9				
Bicarbonate as HCO ₃	151				
Supersaturation as CaCO ₃					
Undersaturation as CaCO ₃					
Total Hardness as CaCO ₃	220				
Calcium as Ca	66				
Magnesium as Mg	14				
Sodium and/or Potassium	42				
Sulfate as SO ₄	83				
Chloride as Cl	74				
Iron as Fe	0.23				
Barium as Ba					
Turbidity, Electric					
Color as Pt					
Total Solids, Calculated	430				
Temperature °F.					
Carbon Dioxide, Calculated					
Dissolved Oxygen, Winkler					
Hydrogen Sulfide	0.0				
Resistivity, ohms/m at 77° F.	18.50				
Suspended Oil					
Filtrable Solids as mg/l					
Volume Filtered, ml					

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form No. 3

By

Waylan C. Martin, M. A.

Exhibit 6



Inter-Department Correspondence

TO Whom it may concern
FROM Jerry Buckles
SUBJECT Windmill Water Sample

DATE October 22, 1981

AFFIDAVIT

On October 22, 1981 Mike Braswell sampled the water from a windmill located in the SE/4 SE/4 Section 23, T16S, R31E, Eddy County, New Mexico.

Water sample was analyzed by Martin Laboratories, Inc., Midland, Texas

A handwritten signature in cursive script that reads "Jerry E. Buckles". The signature is written in dark ink and is positioned to the right of the typed text.

TRETOLITE DIVISION

368 Marshall Avenue / Saint Louis, Missouri 63119
(314) 961-3500 / TWX 910-760-1660 / Telex 44-2417

19a

WATER ANALYSIS REPORT

COMPANY

Anadarko Prod. Co.

SOURCE

Arwood Boyd Property
Well Com. 50-50
Sample point:
Injection Water

Submitted by: Hughes, J.
Sampled by: Hughes, J.
Distribution Center: Midland

Sample date: 5/15/81
Analysis Date: 5/22/81
Analysis No.: 8806

SAMPLE ANALYSIS

Appearance: Clear
Sp. Conductivity:
pH: 7.7

120000 micromhos/cm

Color: Colorless
Chem. Treatment: N/A
H2S (Qualitative): Neg.

constituent **	ppm	meq/l	method	comments
Sodium (Na+)	25900	1130	icp	
Potassium (K+)	950.	24.	icp	
Lithium (Li+)	1.	0.1	icp	
Calcium (Ca++)	2730	136.	icp	
Magnesium (Mg++)	2280	188.	icp	
Barium (Ba++)	<0.7	-	icp	
Strontium (Sr++)	60.	1.	icp	
Aluminum (Al+++)	<0.7	-	icp	
Silver (Ag+)	<0.08	-	icp	
Arsenic (As+++)	<3.	-	icp	
Chromium (Cr+++)	<0.3	-	icp	
Copper (Cu++)	<0.05	-	icp	
Iron (Fe++)	<0.08	-	icp	
Mercury (Hg++)	<0.8	-	icp	
Lead (Pb++)	<1.	-	icp	
Antimony (Sb+++)	<10	-	icp	
Tin (Sn++)	<3.	-	icp	
Titanium (Ti++++)	<0.05	-	icp	
Zinc (Zn++)	<0.2	-	icp	
Boron (B) ***	35.3	9.80	icp	
Phosphate (PO4---)	<3.	-	icp	
Chloride (Cl-)	49300	1390	titr	
Sulfate (SO4--)	965.	20.1	turb	
Bicarbonate (HCO3-)	198.	3.2	titr	
Carbonate (CO3--)	<1.	-	titr	
Silica (SiO2)	23.	-	icp	

Exhibit H

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Analysis No. 8806

NOTES TO ANALYSIS

Ion Balance

Sum of cations:	1480 meq/l	Standard deviation:	23.4 meq/l
Sum of anions:	1420 meq/l	Standard deviation:	27.8 meq/l

*TDS Balance

Measured:	85000 ppm	Standard deviation:	4260 ppm
Calculated:	82600 ppm	Standard deviation:	1120 ppm

indicates that the amount of this component has changed in a statistically significant way since the last analysis

N/A= not available

meq/l= milliequivalents per liter

ppm and milligrams per liter used interchangeably

icp= inductively coupled plasma emission

titr= titration; turb= turbidimetric

TDS by gravimetric determination

Specific Conductivity by Wheatstone Bridge

* Total Dissolved Solids

** Valency given is arbitrarily chosen and is not necessarily the true valency unless indicated in the column for comments

*** TDS boron is given as ppm elemental boron, but for the purposes of an ion balance, boron is converted to B03---

The various parameters in the above results can be usefully interpreted using the guidelines below:

1) pH value is an indication of the acidity or basicity of a brine. pH measurements provide critical information about a) the solubility of sparingly soluble compounds, b) the carbonate scaling tendency, c) iron oxidation state and d) caution needed in using some external chemical treatments.

2) Specific conductivity: this gives an approximate indication of the total amount of inorganic dissolved solids in the water sample. A simple guideline is that 10,000 micromhos/cm is equivalent to 100 meq/l of dissolved solids. However, this relationship is valid only in solutions with specific conductivities less than approximately 50,000 micromhos/cm.

3) Concentration of various ionic species: the concentrations of various ionic species give information about a) thermodynamic characteristics of the brine, b) scaling tendency of the water, and c) enthalpy of the water.

Analysis No. 8806

HISTORY OF FIELD WATER COMPOSITIONAL DATA

Tretolite is using a new data management system to help the operator in managing his waters in the field. This system is based on a comparison of water-analytical data between this newly and any previously analyzed sample.

Our computer record indicates that no analytical data on waters collected from this well or field have been previously added to our computer file. As more data become available and as our automated data evaluation system indicates any water-related problems in your field, the technical personnel of Tretolite will contact you immediately.

SCALE TENDENCIES OF THE ANALYZED BRINE

In the following paragraphs, the scale tendencies of the brine are analyzed by utilizing some basic thermodynamic correlations. These scale tendency considerations are different from the commonly applied Stiff-Davis Diagrams and calculation methods because those methods are not based on the critical thermodynamic conditions encountered in the field.

CaSO₄

The calcium and sulfate ion concentration of the brine as reported in this analysis does not seem to pose any danger of calcium sulfate precipitation at 76 deg-F.

However, if the brine is heated to a temperature of 220.5 deg-F or higher (at water saturation pressure), this brine would have a tendency to precipitate calcium sulfate.

It has to be remembered that CaSO₄ scale tendency decreases with increasing pressure. This means, if the system pressure is higher than the water vapor saturation pressure, calcium sulfate scale would form at a temperature higher than reported.

BaSO₄

TRETOLITE DIVISION

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Analysis No. 8806

The barium and sulfate ion concentrations of the brine as reported in this analysis indicate a definite potential for barium sulfate precipitation at 76 deg-F. This indicates that barium sulfate precipitation has already occurred somewhere in this system before the wellbore brine is brought to the ambient conditions.

However, the maximum amount of BaSO_4 that can be precipitated is 1.189 Mg/liter of the brine.

SrSO_4

The strontium and sulfate ion concentrations of the brine as reported in this analysis indicate that there is no danger of strontium sulfate precipitation.

CaCO_3

At 76 deg-F, the stability index is (+): implies scaling tendency.

The precise calcium carbonate scaling tendency of the brine cannot immediately be determined without the required information on temperature, pressure, pH and partial pressure of carbon dioxide above the brine. The Stiff-Davis Stability Index gives only a crude approximation of the CaCO_3 scale tendencies. This stability index is given for the sake of completeness.

QUANTITATIVE INFORMATION ON ALL SCALE TENDENCIES

Quantitative information can be extracted on all scaling tendencies of this brine if the temperature and pressure conditions of the brine are available. The most complicated calculations have to be performed on the CaCO_3 scale tendencies. The other scale tendencies are easier to determine.

WELL TREATMENT REPORT

DOWELL

DOWELL DIVISION OF DOW CHEMICAL U.S.A.

DWL 494-N PRINTED IN U.S.A.

WELL NAME AND NUMBER

BRINSON #4

LOCATION (LEGAL)

SEC. 36-16-31

DOWELL LOCATION

AATESIN OF

DATE

1/1/76

TREATMENT NUMBER

05-3187

POOL / FIELD

Grayburg

FORMATION

GRAYBURG

COUNTY / PARISH

STATE

New Mexico

TYPE OF SERVICE

☐ Acidizing
☐ Fracturing☐ Sand Control
☐ Other

SERVICE NAME

VFPSD

JOB DONE DOWN

TUBING ☐ CASING ☒ ANNULUS ☐OIL ☒ TYPE OF WELL ☐ GAS ☐ WATER ☐ INJ. ☐

AGE OF WELL

NEW WELL ☒REWORK ☐

ALLOWABLE PRESSURE

TGB 3800

OIL API GRAVITY

VAPOR PSI

TOTAL DEPTH

BHT (LOG)

CASING SIZE WT. DEPTH

TYPE OR GRADE

LINER SIZE WT. TOP-BOTTOM

TUBING SIZE WT. DEPTH

PACKER TYPE PACKER DEPTH

OPEN HOLE

CASING VOL.

TUBING VOL.

ANNULAR VOL.

PERFORATED INTERVALS

TOP	TO	BOTTOM	NO. OF HOLES	TOP	TO	BOTTOM	NO. OF HOLES
3848	TO	3885	1		TO		
	TO				TO		
	TO				TO		
	TO				TO		

FOR CONVERSION PURPOSES 24 BBLS EQUALS 1000 GALLONS

ARRIVED ON LOCATION:

LEFT LOCATION:

DIAMETER OF PERFORATIONS =

TIME (0001 to 2400)	INJECTION RECORD							PRESSURE		NOTATIONS
	RATE BPM	TYPE OF FLUID	DENSITY	INCREMENT VOL. BBLS	CUM. VOL. BBLS	PROP TYPE	PROP #/GAL	CSG.	TBG.	
										Pre-Job Safety Meeting
16										Pre-Job Pressure Test To 450 psi
16:00	14	VF 3		48				1800		START INJ.
16:05	14	VF 3		14	72			2450		START INJ. INJ.
16:10	20	VFPSD		40	120	F/A-100		2450		START INJ.
16:15	20	VFPSD		74	194			2500		START INJ.
16:20	20	VFPSD		48	192	F/A-100		2600		INCREASE INJ.
16:25	20	VFPSD		24	716			2600		INCREASE INJ.
16:30	30	VFPSD		95	311	20/40	1#	2800		START INJ.
16:35	30	VFPSD		119	430	20/40	2#	3150		INCREASE INJ.
16:40	30	VFPSD		143	573	20/40	3#	3200		INCREASE INJ.
16:45	30	VFPSD		238	811	20/40	4#	3300		INCREASE INJ.
16:50	20	VFPSD		119	930	8/12	4#	3300		PHASED INJ.
16:55	20	VFPSD		41				3500		FLOW IN
17:00					951			4300		SHUT DOWN / SCREENED OR 1700 SAMPLING
17:05								3500		ISIP
17:10								1800		K MIN

FRAC. GRADIENT

AVG. INJECTION RATES

LIQ. 200.0

W/PROP 33.9

MATERIALS CHARGED FOR:

TOTAL FLUID

457

TREATING PROP

1052

98000

BBLS

LBS

TREATING PRESSURE SUMMARY

MAX 4500

FINAL 3000

AVG. 3000

IMMED. S.D.P.

15 MIN. SIP 1800

5 MIN - 3200

10 MIN 2000

PRODUCTION PRIOR TO THIS TR

☐ Test Stabilized

CUSTOMER REPRESENTATIVE

DOWELL SERVICE SUPERVISOR

ILLEGIBLE

EXHIBIT I

BRINSON #4, GRAYBURG JACKSON FIELD, EDDY CO., NM, APC WI 100.0%, NRI 84.7315%, ETD 4100', GRAYBURG FORMATION, LOC: 1650 FNL & 990 FEL, SEC 36, T16S, R31E, C/WARTON, AFE PENDING, ELEV. 4145 GL.

FIRST REPORT

- 5/7/81 Spud 465' (465') MIRU Warton Rig #8, Spud @ 6:45 PM, 5-6. Ran 8-5/8" csng and set @ 457'.
- 5/8 Drlg 908' (443') MW 10.0 DC \$7500 CC \$48,900
- 5/9 Drlg 2032 (1124') MW 10.0, Vis 28, CL 168,000, Dev. 1/2° @ 1500'.
- 5/10 Drlg 2664 (632') MW 10.0, Vis 28, Dev 3/4° @ 2061', 1° @ 2538'.
- 5/11 Drlg 3102 (438') MW 10.0, Vis 28, Dev 3/4° @ 3038'.
- 5/12 Drlg 3470' (368'). Trip for bit #3 @ 3470'. MW 10.0, Vis 28.
- 5/13 Drlg 3726' (256') Dev 3/4° @ 3470'. MW 10, Vis 28.
- 5/14 Drlg 4000' (274') MW 10.0, Vis 28, CL 170,000.
- 5/15 Log TD 4014' (10') TIH w/ DLL, tool did not work, TIH w/Comp Neutron-Density, stuck @ 3849', TIH w/side door O/S & bumper sub, rec fish.
- 5/16 Log TD 4028' (18') TIH & CO 80' fill. GD ran DLL, tool did not work. Schl ran Dll-MSFL 4025-458, GR-CNL-FDC 4026 surf, Computer log 4010-3480.
- 5/17 Set csng TD 4028'. Ran 5-1/2, 15.5# K-55, 8 RST&C "A" csng and set @ 4027'. Pmpd 500 sxs Hali-lite w/5# Gilsonite/sx, 1/4# floseal/sx and 8# salt/sx, tailed in w/250/sxs Class "H" w/5# salt/sx, 0.5% CFR.2, 10# sd/sx. Washed out pump and lmes (3 min) rel plug, pmp 22 BFW to catch plug, press to 2000 psi, could not move plug. Calc TOC 2000'. Rel rig @ 4:00 AM 5-15.
- 5/18 WOC. TD 4028'. Prep to DO cmt.
- 5/19 MORT TD 4028. MI Comp Unit.
- 5/20 Drld cmt TD 4028', PBTD 1430. Drld plug and cement from 1351-1430 in 3 hrs.
- 5/21 Drl cmt TD 4028 Drld cmt 1430-1774' (344').
- 5/23 Drlg cmt TD 4028'. Drld cmt 2175 to 2363.
- 5/24-26 SD - Holidays TD 4028'.
- 5/27 Drlg cmt TD 4028. Drld cmt 2363 to 2500 (137')/6 hrs.
- 5/28 Drlg cmt (303) TD 4028', PBTD 2803'.
- 5/29 Drlg cmt TD 4028. Drld cmt 2803' to 3203'/12 hrs.
- 6/2 WOCU TD 4028', PBTD 4010'.
- 6/3 Log TD 4028', PBTD 4010'. Ran CBL, TOC @ 1357'. Good Bonding.
- 6/4 WOCU TD 4028', PBTD 4010'.

BRINSON #4, GRAYBURG JACKSON FIELD, EDDY CO., NM, ETD 4100'.

Page 2

- 6/5 WOCU TD 4028', PBTD 4010'. Temp drop pending comp unit.
- 7/7 WOC
- 7/8 Prep to acidize: perforate Premier 3843-44, 3861-66, 3872-82 & 3885 1 SPF (20 holes).
- 7/9 Prep to frac: TD 4028, PBTD 4010, TIH w/pkr & 2-3/8 tbg. Acidize perfs 3843-85 w/1000 gal 15% NE acid + 30 BS. Max pres 5800-balled off. Avg rate 5 BPM @ 2850, flush w/100 bbl fresh wtr. ISIP 1350, 5 min 570, 25 min 0, TOH w/tbg & pkr. Rel PU, 150 BLWTR.
- 7/10 Prep to frac. TD 4028, PBTD 4010.
- 7/11 Frac: TD 4028, PBTD 4010, Frac perfs 3843-3885 w/37,000 gal x-link, 4600 gal WF-30 gel, 110 gal scale inhib w/6000# 100 mesh, 72,000# 20/40, 20,000# 8/12, Max Pres 4300, Avg Rate 34 BPM @ 3000. Screened out w/7 Bbl of flush to go.
- 7/12 SI.
- 7/13 SI.
- 7/14 SI: TD 4028, PBTD 4010, Prep to rec frac.
- 7/15-17 SI: TD 4028, PBTD 4010, Prep to rec frac.
- 7/18 WOCU: TD 4028, PBTD 4010, SICP 0, Prep to POP.
- 7/19 RUPU: TD 4028, PBTD 4010, TIH to CO frac sand.
- 7/20 SD for Sunday: TD 4028, PBTD 4010.
- 7/21 CO frac sand: TD 4028, PBTD 4010.
- 7/23 Pmpg: Set test unit & tank, POP, 1 BO, 28 BW/4 hrs, engine trouble.
- 7/24 Pmpg: 5 BOPD, 15 BWPD, 857 BLWTR.
- 7/25 Pmpg: 8 BOPD, 0 BWPD.
- 7/26 Pmpg: 9 BOPD, 5 BWPD, 852 BLWTR.
- 7/27 Pmpg: 3 BOPD, 0 BWPD, pumped off.
- 7/28 SI: Pmpg problem, prep tp pull well.
- 7/29 MIRUPU: TOH w/ BHP, sand in pump, TIH w/new BHP, POP, Rel PU.
- 7/30 Pmpg: 13 BOPD, 2 BWPD/17 hrs.
- 7/31 Pmpg: 8 BOPD, 3 BLW, BLWTR 847.

APC OPERATED- DEVELOPMENT WELL

BRINSON #4, GRAYBURG JACKSON FIELD, EDDY CO., NM, ETD 4100'.

Page 3

8/1 pmpg, TD 4028, PBTD 4010, P/3 BO & 2 BLW/12 hrs, engine died. BLWTR 845.

8/2 Pmpg, TD 4028, PBTD 4010 P/3 BO & 0 BLW/12 hrs.

8/3 Pmpg, TD 4028, PBTD 4010 P/10 BO & 0 BLW/12 hrs, BLWTR-845

8/4 Pmpg, TD 4028, PBTD 4010 P/2 BO & 1 BLW. BLWTR 844 cc \$262,300.

8/5 Pmpg: P/6 BO & 2 BLW, BLWTR 842, WO Conoco to test gas.

8/6 Pmpg: P/4 BO, 0 BLW, BLWTR 842.

8/7 Pmpg: TD 4028, PBTD 4010, P/3 BO & 0 BW, BLWTR 842.

8/8 Pmpg: TD 4028, PBTD 4010, P/2 BO & 0 BW.

8/9-10 Unit down for repairs: TD 4028, PBTD 4010.

8/11 No test: TD 4028, PBTD 4010, Unit down (wrist pin).

FINAL REPORT

8/14 Pmpg: TD 4028, PBTD 4010, 10 BOPD, 0 BWPD, 8.4 MCFD, Fuel 6 MCFD,
Vert 2.4 MCFD.

-ORO NEGRO PARTNERSHIP

OYD OPERATING COMPANY - OPERATOR

#8 Robinson Federal

Section 25, T16S, R31E, Eddy County, New Mexico

Drilling Contractor: WEK Drilling Company 623-5070

- 3/4/75 T.D. 717' anhyd & red beds WOC Dev. $1/4^{\circ}$ @ 455'. Commenced drilling @ 8:00 A.M. 8/3/75. Drilled 11" hole to 438' ran 11 jts of 8 5/8" (438'), set @ 450' and cemented w/175 sx. Cl. C. cement w/2% CaCl₂ circulated 30 sx., plug down 4:30 P.M. 8/3/75. 12 hours. MW 9 Visc 29.
- 8/5/75 Drilling @ 2452'. Deviation @ 954 $1/2^{\circ}$, 1450'- $3/4^{\circ}$, 1932'- $3/4^{\circ}$.
- 8/6/75 Drilling @ 3050' in anhyd. MW 10.2. Deviation @ 2417'- 1° , 2800'- $1\ 1/4^{\circ}$, 2995'- $1\ 1/4^{\circ}$.
- 8/7/75 Drilling @ 3430' in line. MW 10.2 Visc 29. Deviation @ 3457'- $1\ 1/2^{\circ}$.
- 8/8/75 Drilling @ 3773' in line. MW 10.2 Visc. 34.
- 8/9/75 3843' Coring. Drilled to 3802'. Picked up core barrell. Cored from 3802' to 3843'. Deviation @ 3802'- 2° . Wgt. 10.2. Visc. 34, W.L. 10.0 F.C. 2/32. 2% oil.
- 8/10/75 3970' Tripping for Core #2. Ccore #1 3802-3862, 60'. Rec. 54'. Assume btm. 6' drilled up. Weight 10.2, Visc. 34, W.L. 9.0, F.C. 2/32. 2% Oil.
- 8/11/75 F.T.D. 4050'. Coming out of hole to log. Core #2 - 3970-4012' 42', Rec. 41.6'. Drilled from 4012 to 4050'. Wgt. 10.2. Visc. 35, W.L. 10.0, F.C. 2/32/ Should have logs by 3:30 P.M.
- 8/12/75 W.O.C. F.T.D. 4050'- 2° . Ran compensated Neutron-Fm. Density and Dual Laterolog. Tripped and laid down D.P. Ran 101 jts 4074' of 4 1/2", 10.5#, J-55 csg. Set @ 4050' K.B. Cemented w/335 sx. 50-50 Pozmix w/8# salt/sx. Plug down and rig released @ 12:15 A.M. 8/12/75.
- CORE #1 3802-3862' (Premier) Cut 60' Recovered 54' Lost bottom 6'

Description: 35' dolomite, very sandy in part.
 4' shale, red, sandy in part
 15' sand, red & gray, very fine grained
 Bottom 5' of core-slightly bleeding, oil & gas. Good stain and odor.

CORE #2 3970-4012' (Lovington) Cut 42' Recovered 41.6'.

Description: 21' Dolomite, crystalline w/black shale stringers.
 5' sand, gray, very fine grained-bleeding oil and gas. Good saturation, good odor.
 4.5' Dolomite, crystalline w/trace gray sandy shale laminations.
 6.5' Sand, gray, very fine grained-bleeding oil & gas. Good saturation, good odor.
 4.6' Dolomite, crystalline-dense, w/thin gray sandy shale laminations.

3/18/75 Temperature Survey - Cement top 2900' PBTD 4036' K.B.

Ref: Para XII-C-108

ANADARKO PRODUCTION COMPANY

Exhibit J

Boyd-Robinson Waterflood
Eddy County, New Mexico

AFFIRMATIVE STATEMENT

ANADARKO PRODUCTION COMPANY has examined available geological 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

Boyd-Robinson Waterflood
Eddy County, New Mexico

NOTICE

Pursuant to Section XIV,

Applicant has mailed copies of the application to the following:

Surface owners:

- (1) S/2 and SE/4 NE/4 Section 25, T16S, R31E,
Eddy County, New Mexico

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

- (2) NE/4 Section 36, T16S, R31E, Eddy County

Commissioner of Public Lands
P.O. Box 1148
Santa Fe, New Mexico 87501
Attn: Mr. Ray Graham

- (3) W/2 Section 30, T16S, R32E, Lea County

Cecil E. and Ella Belle Holeman
P.O. Box 1295
Maljamar, New Mexico 88264
AC (505) 676-2121 (Taylor #2)

Leasehold Operators within one-half mile:

Southland Royalty Co.
1100 Wall Towers West
Midland, Texas 79701

Arwood LTD
P.O. Box 8
Loco Hills, New Mexico 88255

Mercury Production Co.
1212 Ridglea State Bank Bldg.
Fort Worth, Texas 76116

Boyd Operating Co.
P.O. Box 1756
Roswell, New Mexico 88201

Applicant has caused to be published in the Carlsbad Current-Argus, a newspaper of general circulation in Eddy 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 Administrative Order approving Salt Water Injection wells for its Boyd-Robinson Waterflood Project as follows:

Township 16 South, Range 31 East

Section 25: Baxter-Federal B#2 - 1980 feet from North line and 660 feet from East line;
 Robinson #6 - 1920 feet from South line and 2070 feet from East line;
 Robinson #8 - 990 feet from South line and 1650 feet from West line;
 Section 36: Brinson State #2 - 330 feet from North line and 990 feet from East line;
 Brinson State #3 - 1650 feet from North line and 2310 feet from East line.

Township 16 South, Range 32 East

Section 30: Taylor #2 - 990 feet from South line and 330 feet from West line.

Lea County, New Mexico as water injection wells in the Grayburg formation at a depth of about 3850 feet at a maximum rate of 250 barrels per day per well at a maximum injection pressure of 2400 psi.

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.

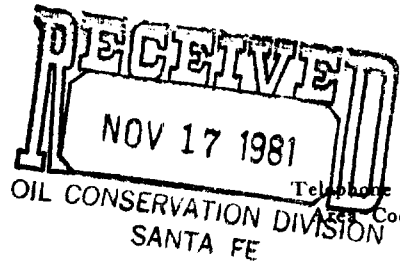
KELLAHIN & KELLAHIN
 Attorneys at Law
 P.O. Box 1769
 Santa Fe, New Mexico 87501
 (505) 982-4285

ATTORNEYS FOR ANADARKO PRODUCTION COMPANY

Additional

Jason Kellahin
W. Thomas Kellahin
Karen Aubrey

KELLAHIN and KELLAHIN
Attorneys at Law
500 Don Gaspar Avenue
Post Office Box 1769
Santa Fe, New Mexico 87501



Telephone 982-4285
Fax Code 505

November 16, 1981

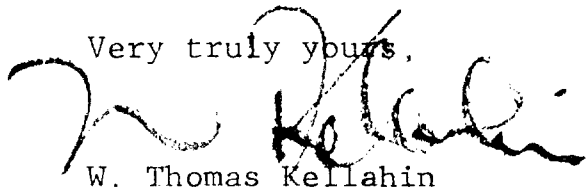
The Lovington Leader
14 West Avenue B
Lovington, New Mexico 88260

RE: Anadarko Production Company

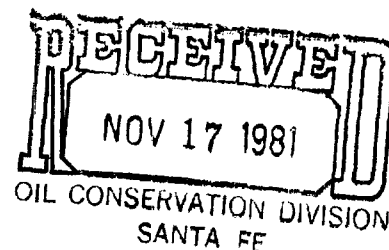
Dear Sir:

Please publish the enclosed notice once at your earliest convenience. Please send me your statement and proof of publication.

Very truly yours,


W. Thomas Kellahin

WTK:jm
Enclosure
cc: Mr. Oscar Simpson



NOTICE OF PUBLICATION

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

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Township 16 South, Range 31 East

Section 25: Baxter-Federal B#2 - 1980 feet from North line and 660 feet from East line;

Robinson #6 - 1920 feet from South line and 2070 feet from East line;

Robinson #8 - 990 feet from South line and 1650 feet from West line;

Section 36: Brinson State #2 - 330 feet from North line and 990 feet from East line;

Brinson State #3 - 1650 feet from North line and 2310 feet from East line.

Township 16 South, Range 32 East

Section 30: Taylor #2 - 990 feet from South line and 330 feet from West line.

Lea and Eddy Counties, New Mexico as water injection wells in the Grayburg formation at a depth of about 3850 feet at a maximum rate of 250 barrels per day per well at a maximum injection pressure of 2400 psi.

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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

Telephone 982-4285

Area Code 505

Jason Kellahin
W. Thomas Kellahin
Karen Aubrey

November 20, 1981

Mr. Oscar Simpson
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: Anadarko Production Company
Boyd-Robinson Waterflood
Application for Administrative Approval

Dear Mr. Simpson:

Please find enclosed a copy of the Carlsbad Current Argus, affidavit of publication in the above referenced application.

Please let me know if you require anything further.

Sincerely,

W. Thomas Kellahin

WTK:jm
Enclosure
cc: Mr. Dan Kernaghan

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

E. C. Cantwell, being first duly sworn,
on oath says:

That he is publisher of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

November 17, 1981

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that the cost of publication is \$ 13.98,
and that payment thereof has been made
and will be assessed as court costs.

E. C. Cantwell

Subscribed and sworn to before me this

18 day of November, 1981
Orrelia J. [Signature]

My commission expires 5-27-84
Notary Public.

NOV 25 1981
OIL CONSERVATION DIVISION
SANTA FE

November 17, 1981
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY AND MINERALS
DEPARTMENT OF
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 Administrative Order approving Salt Water Injection wells for its Boyd-Robinson Waterflood Project as follows:
Township 16 South, Range 31 East
Section 25: Baxter-Federal B#2 - 1980 feet from North line and 660 feet from East line; Robinson #6 - 1920 feet from South line and 2070 feet from East line; Robinson #8 - 990 feet from South line and 1650 feet from West line;
Section 36: Brinson State #2 - 330 feet from North line and 990 feet from East line; Brinson State #3 - 1650 feet from North line and 2310 feet from East line.
Township 16 South, Range 32 East
Section 30: Taylor #2 - 990 feet from South line and 330 feet from West line.
Lea County, New Mexico as water injection wells in the Grayburg formation at a depth of about 3850 feet at a maximum rate of 250 barrels per day per well at a maximum injection pressure of 2400 psi.
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.

KEILAHIN & KEILAHIN
Attorneys at Law
P.O. Box 1769
Santa Fe, New Mexico
87501
(505) 982-4285
ATTORNEYS FOR ANADARKO
PRODUCTION COMPANY

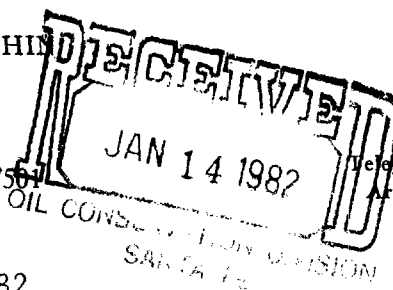
Jason Kellahin
W. Thomas Kellahin
Karen Aubrey

KELLAHIN and KELLAHIN

Attorneys at Law

500 Don Gaspar Avenue
Post Office Box 1769

Santa Fe, New Mexico 87501



Telephone 982-4285
Area Code 505

January 13, 1982

Mr. Oscar Simpson
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: Anadarko's Boyd-Robinson Waterflood

Dear Mr. Simpson:

I have just received the enclosed affidavit of publication for the Lovington Daily Leader concerning the publication of notice required for the administrative approval of the referenced waterflood project.

The original application was filed by me on November 10, 1981. Please advise us when we might expect final action by the Division on this application.

Very truly yours,

A handwritten signature in dark ink, appearing to read "W. Thomas Kellahin".

W. Thomas Kellahin

WTK:jm
Enclosure
cc: Mr. Dan Kernaghan

Affidavit of Publication

STATE OF NEW MEXICO)

) ss.

COUNTY OF LEA)

Joyce Sharp being first duly sworn on oath
poses and says that he is Adv. Manager of
THE LOVINGTON DAILY LEADER, a daily newspaper
general paid circulation published in the English
language at Lovington, Lea County, New Mexico; that
said newspaper has been so published in such county
continuously and uninterruptedly for a period in excess
Twenty-six (26) consecutive weeks next prior to the
first publication of the notice hereto attached as here-
after shown; and that said newspaper is in all things
fully qualified to publish legal notices within the mean-
ing of Chapter 167 of the 1937 Session Laws of the
State of New Mexico.

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
in any supplement thereof, once each week on the

same day of the week, for One (1)

consecutive weeks, beginning with the issue of

November 20, 1981

and ending with the issue of

, 19

And that the cost of publishing said notice is the

sum of \$18.13

which sum has been (Paid) (Assessed) as Court Costs

Joyce Sharp

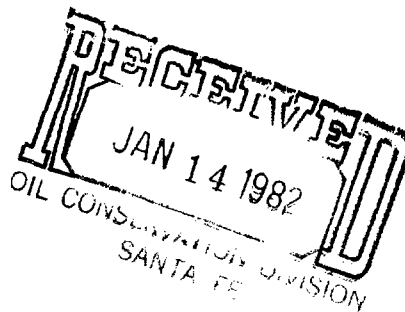
Subscribed and sworn to before me this 28th

day of December, 1981

Ms. Jean Series

Notary Public, Lea County, New Mexico

My Commission Expires September 28, 1982



LEGAL 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, Ana-
darko Production Company,
hereby gives public notice that
it has applied to the Division
for an Administrative Order
approving Salt Water Injection
wells for its Boyd-Robinson
Waterflood Project as follows:
Township 16 South, Range 31
East

Section 25: Baxter-Federal B-
No. 2-1980 feet from North
line and 660 feet from East
line;

Robinson No. 6-1920 feet
from South line and 2070
feet from East line;

Robinson No. 8-990 feet
from South line and 1650
feet from West line;

Section 36: Brinson State
No. 2-330 feet from North
line and 990 feet from East
line;

Brinson State No. 8-1650
feet from North line and 2310
feet from East line.

Township 16 South, Range
32 East

Section 30: Taylor No. 2-
990 feet from South line
and 330 feet from West line.

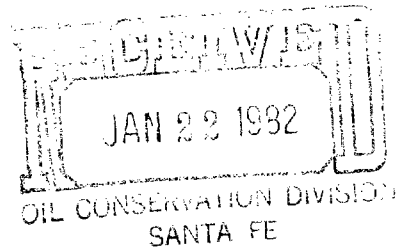
Lea and Eddy Counties, New
Mexico as water injection wells
in the Grayburg formation at a
depth of about 3850 feet at
a maximum rate of 250 bar-
rels per day per well at a maxi-
mum injection pressure of
2400 psi.

Any interest party must file
objections or requests for
hearing with the Oil Conser-
vation Division, P.O. Box
2088, Santa Fe, New Mexico,
87501, within fifteen (15)
days of the date of publica-
tion of this notice.

Kellahin & Kellahin
Attorneys at Law
P.O. Box 1769
Santa Fe, New Mexico 87501
(505) 982-4285

Attorneys for Anadarko Pro-
duction Company.
Published in the Lovington
Daily Leader November 20,
1981.

OIL CONSERVATION COMMISSION
Artesia DISTRICT



OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE January 21, 1982

RE: Proposed MC _____
Proposed DHC _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX ☒ _____
Proposed PMX _____

Gentlemen:

I have examined the application dated November 10, 1981
for the Anadarko Production Co Boyd Robinson Waterflood
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approval to set packer above liner top. on the
Brinson State #2 A-36-16-31

Yours very truly,

Mike Williams

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE