

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: Anadarko Petroleum Corporation

Address: P. O. Drawer 130, Artesia, New Mexico 88210

Contact party: Jerry E. Buckles Phone: 505/748-3368

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

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

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

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

VII. Attach data on the proposed operation, including:

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

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

IX. Describe the proposed stimulation program, if any.

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

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

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

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

XIV. Certification

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

Name: George R.S. Buehler Title Staff Production Engineer

Signature: *George R.S. Buehler* Date: October 11, 1991

* 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.

III. WELL DATA

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.

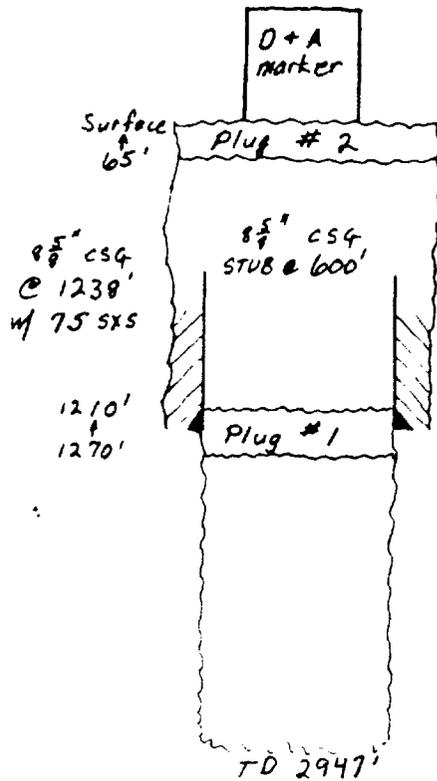
Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (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.

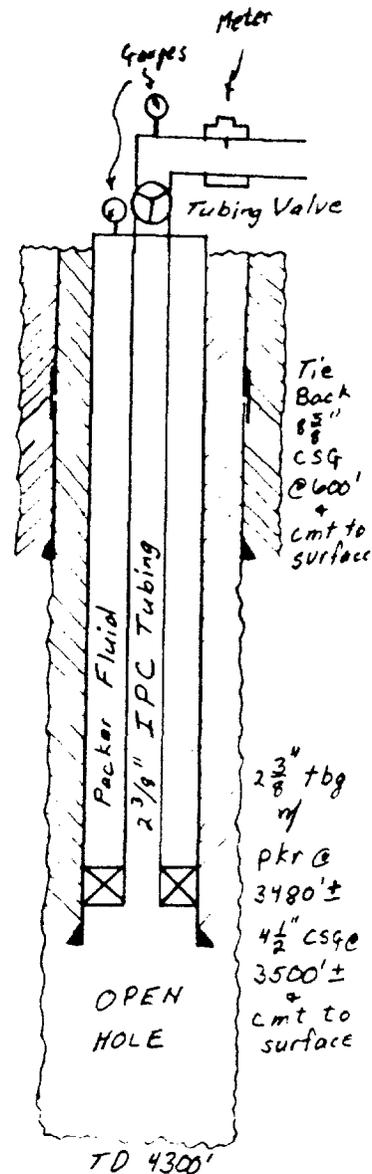
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

III A
WELL DATA SHEET



Before Re-entry

Date Spudded: February 24, 1957
 Plugged: March 2, 1957
 8-5/8" casing @ 1238' w/75 sxs
 14 jts 28#
 26 jts 24#
 TD 2947'
 Cut and pulled 600' of 8-5/8" casing plugs
 #1 1270' to 1210'
 #2 65' to surface



After Re-entry

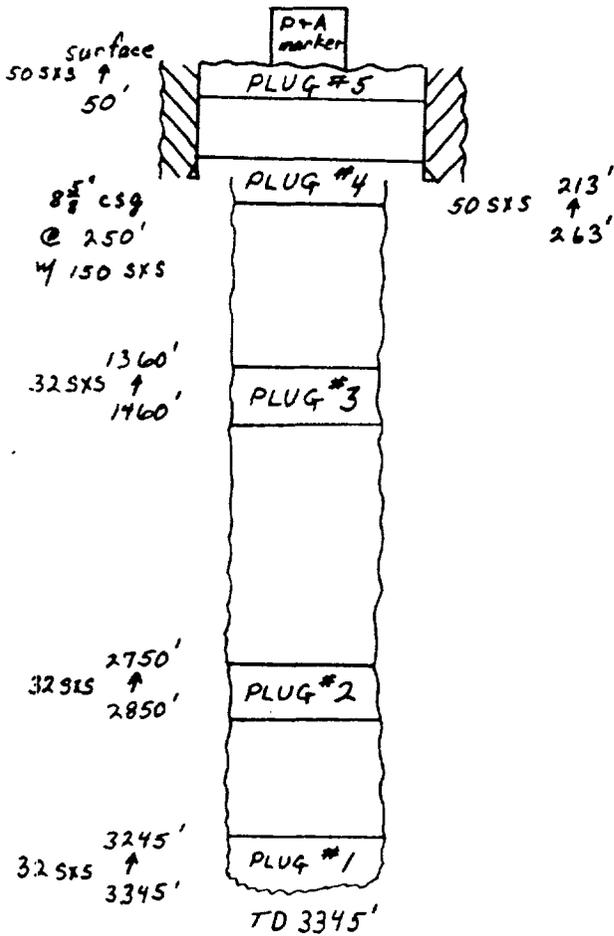
8-5/8" casing 1238' to surface
 1) Dress off csg stub & run fluid caliper
 2) Bowl over & cement to surface
 Drill new 7-7/8" hole 2947' to 4300'
 Set 4-1/2 csg @ 3500' & cement to surface
 Set 2-3/8" IPC tbg @ 3485'± w/Arrow - Set 1 J-lock Injection Packer
 (Injection Into Zone 3500' to 4300')
 Estimated Avg. Inj 1000 BWPD
 Estimated Avg Inj Pres 200 psi
 Estimated Maximum Pres 700 psi

III B

- 1) Disposal Formation: Capitan Reef
- 2) Disposal Interval: 3500-4300 (Open Hole)
- 3) Well was originally drilled to a TD of 2947'
The original operator Hudson & Hudson, Inc. had filed an intent to drill to 3100' with rotary tools and then change to cable tools and drill to 4300', set 5-1/2" casing and complete an oil well with perforations. Hudson & Hudson, Inc. never finished drilling the well but instead plugged the well March 2, 1957.
- 4) Well was partially drilled and abandoned prior to TD.
Plug #1 1270' to 1210' (amt cmt NR)
8-5/8" csg cut & pulled @ 600'
Plug #2 65' to surface (amt cmt NR)
- 5) The highest possible oil zone in this area is the Yates @ 2833' to 3255'

The next lower possible oil zone in this area is the Delaware @ 4977' to 7700'

WELL DATA SHEET



Date Spudded: July 4, 1960

Plugged: July 12, 1960

8-5/8" csg @ 250' w/150 sxs

TD 3345

Plug #1 32 sxs 3345'-3245'

Plug #2 32 sxs 2850'-2750'

Plug #3 32 sxs 1460'-1360'

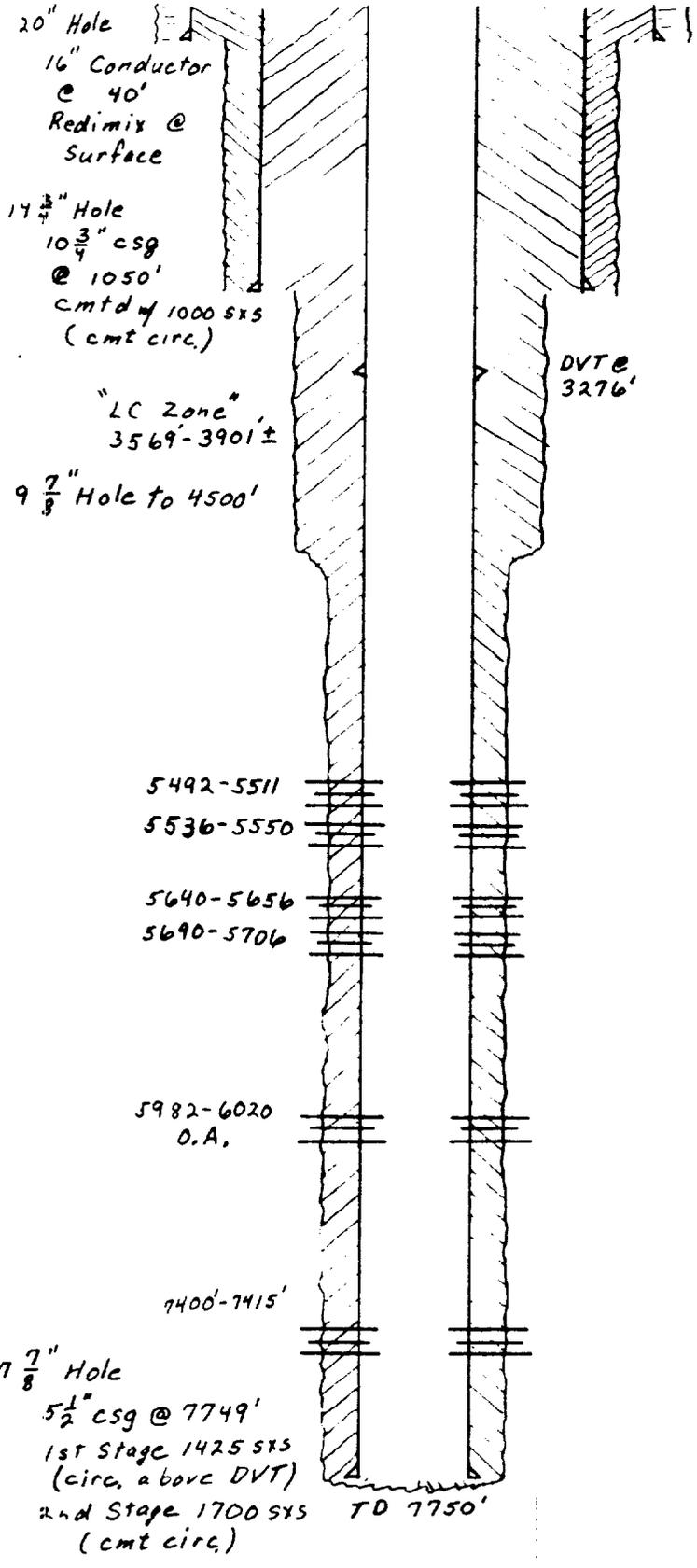
Plug #4 50 sxs 263'-213'

Plug #5 50 sxs 50'-surface

NOTE: This well appears to
of penetrated the top
of the capitan reef.

(Applied for disposal
zone is 3500'-4300')

WELL DATA SHEET



Date Spudded: June 5, 1991
 Completed: August 5, 1991
 20" Hole
 16" csg set @ 40' & redimixed to surface
 14-3/4" Hole
 10-3/4" csg set @ 1050'
 Cmt'd w/1000 sxs (cmt circ.)
 9-7/8" Hole to 4500'
 LC @ 3569 to 3901±
 Regain circ w/400 sxs cmt
 Hole 7-7/8" (reduce bit size @ 4500')
 TD 7750'
 5-1/2" csg @ 7749
 FC @ 7702
 DVT @ 3276
 1st stage w/1425 sxs (cmt to DVT)
 Open DVT & circ out 75 sxs
 2nd stage w/1700 sxs
 circ out 227 sxs

DELAWARE PERFORATIONS
 perfs 7400-15 2 SPF
 perfs 5982, 86, 89, 92, 96, 98, 6003, 08, 10
 13, 16, 20 2 SPF
 perfs 5640-56 & 5690-5706
 perfs 5492-5511 & 5536-50 2 SPF

- VII. 1) Avg inj rate 500 BWPD, Max inj rate 1000 BWPD
2) Type system - Closed system
3) 200 avg inj pres max inj pres 700 psi
4&5) a) Water Analysis of EXXON Federal No. 1 - see attached analysis by Unichem #4a
b) Compatability of two waters - see attached analysis by Unichem #4b
c) Water Analysis of Capitan Reef Water from Anadarko's Teas Yates Unit Water Supply Well No. 1 in Section 14-20S-33E - see attached analysis by Unichem #4c
- VIII. a) Lithology - Limestone
b) Geological Name - Capitan Reef
c) Top/Reef-3255''
d) Base/Reef-4977'
e) Drinking Water
1) Name of drinking water zone - Triassic
2) Depth to bottom of drinking water zone - 850 feet
3) Drinking Water under disposal zone - None
- IX. Proposed stimulation to disposal zone - 2000 gallons 15% HCl
- X. Logs & Tests - None, well was never drilled to TD
- XI. 1) Water analysis from drinking water well within 1 mile
a) Location of drinking water well - Sec. 18, T19S, R33E
b) Analysis - see attached sheet from State Engineer's Office
c) Date sample taken - 2-15-83
- XII. See Exhibit XII
- XIII. The following list includes the names of all parties notified of Anadarko's intention to install and operate a water disposal well (namely the EXXON Federal SWD No. 1). See attached list.



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, Fax 505/393/6754

October 10, 1991

Jerry Buckles
Anadarko Petroleum Corp.
P. O. Drawer 130
Artesia, NM 88210

Dear Mr. Buckles:

Enclosed please find our water analyses and compatibility reports from the Teas Yates WSW #1 and Exxon Federal #1.

If you have any questions or require further information, please contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sharon Wright', is written over the typed name.

Sharon Wright
Laboratory Technician

SW/sr

cc: Bill Polk
Joe Hay
John Offutt
Charlie Copeland
Jeff White

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : ANADARKO
 Date : 10-10-1991
 Location: Exxon Federal #1 - Wellhead (on 8/12/91)

	Sample 1
Specific Gravity:	1.157
Total Dissolved Solids:	219389
pH:	6.30
Resistivity:	0.047 ohms @ 76°F
IONIC STRENGTH:	4.952

<u>CATIONS:</u>		me/liter	mg/liter
Calcium	(Ca ⁺²)	1150	23000
Magnesium	(Mg ⁺²)	832	10100
Sodium	(Na ⁺¹)	1980	45600
Iron (total)	(Fe ⁺²)	0.752	21.0
Barium	(Ba ⁺²)	0.051	3.50
Manganese	(Mn ⁺²)	0.190	5.23

<u>ANIONS:</u>		me/liter	mg/liter
Bicarbonate	(HCO ₃ ⁻¹)	4.20	256
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	9.89	475
Chloride	(Cl ⁻¹)	3950	140000

SCALING INDEX (positive value indicates scale)

<u>Temperature</u>		Calcium Carbonate	Calcium Sulfate
104°F	40°C	2.5	1.00
122°F	50°C	2.7	1.00
140°F	60°C	3.1	1.00
168°F	76°C	3.6	1.0
176°F	80°C	3.8	1.0

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : ANADARKO

Date : 10-10-1991

Location: TEAS YATES & EXXON FEDERAL - COMPATIBILITY (on 10-10-1991)

Specific Gravity:	<u>Sample 1</u>
Total Dissolved Solids:	1.149
pH:	208003
IONIC STRENGTH:	6.35
	4.649

<u>CATIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca ⁺²)	1040	20800
Magnesium	(Mg ⁺²)	755	9170
Sodium	(Na ⁺¹)	1950	44800
Iron (total)	(Fe ⁺²)	0.677	18.9
Barium	(Ba ⁺²)	0.049	3.36
Manganese	(Mn ⁺²)	0.172	4.72

<u>ANIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Bicarbonate	(HCO ₃ ⁻¹)	4.54	277
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	18.6	893
Chloride	(Cl ⁻¹)	3720	132000

<u>DISSOLVED GASES</u>		<u>me/liter</u>	<u>mg/liter</u>
Carbon Dioxide	(CO ₂)		1.00
Hydrogen Sulfide	(H ₂ S)		11.9
Oxygen	(O ₂)		0

SCALING INDEX (positive value indicates scale)

<u>Temperature</u>		<u>Calcium Carbonate</u>	<u>Calcium Sulfate</u>
86°F	30°C	1.6	8.6
122°F	50°C	2.5	8.3
140°F	60°C	2.9	8.3
168°F	76°C	3.4	8.0
176°F	80°C	3.6	8.0
200°F	93°C	4.1	8.0

Comments:

COMPATIBILITY = TEAS YATES = 10% & EXXON FEDERAL FEDERAL = 90%

The attached exhibit 4c is capitan reef water, sampled from Anadarko's Teas Yates Unit's Water Supply Well No. 1, located approximately 9 miles southwest of the EXXON Federal SWD No. 3. The WSW No. 1's legal is 1330' FNL & 1330' FWL of Section 14, T20S, R33E, Lea County. The producing capitan reef perforations are:

- 3660-3663
- 3674-3681
- 3696-3700
- 3708-3711
- 3724-3727
- 3746-3749
- 3758-3762

Anadarko produces approximately 3000 BWPD from the Teas Yates Unit WSW No. 1.

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : ANADARKO
 Date : 10-10-1991
 Location: TEAS YATES WSW #1 (on 10-10-1991)

	Sample 1
Specific Gravity:	1.075
Total Dissolved Solids:	105532
pH:	6.75
IONIC STRENGTH:	1.919

<u>CATIONS:</u>		me/liter	mg/liter
Calcium	(Ca ⁺²)	80.0	1600
Magnesium	(Mg ⁺²)	60.0	729
Sodium	(Na ⁺¹)	1660	38100
Iron (total)	(Fe ⁺²)	0.002	0.060
Barium	(Ba ⁺²)	0.031	2.10
Manganese	(Mn ⁺²)	0.003	0.090

<u>ANIONS:</u>		me/liter	mg/liter
Bicarbonate	(HCO ₃ ⁻¹)	7.60	464
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	96.8	4650
Chloride	(Cl ⁻¹)	1690	60000

<u>DISSOLVED GASES</u>		
Carbon Dioxide	(CO ₂)	10.0
Hydrogen Sulfide	(H ₂ S)	119

SCALING INDEX (positive value indicates scale)

<u>Temperature</u>		Calcium Carbonate	Calcium Sulfate
86°F	30°C	-0.06	-17
122°F	50°C	0.87	-17
140°F	60°C	1.2	-17
168°F	76°C	1.8	-12
176°F	80°C	1.9	-12
200°F	93°C	2.4	-12



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

ELUID MARTINEZ
STATE ENGINEER

ROSWELL

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
(505) 622-6521

October 2, 1991

George Buehler
Anadarko Petro Corporation
P. O. Box 2497
Midland, Texas 79702

Dear Mr. Buehler:

Please find enclosed the information you requested from our office concerning wells in the area of 19S.32E.

If our office can be of any further assistance to you, please do not hesitate to contact us.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth H. Fresquez".

Kenneth Fresquez
Field Supervisor

KF/lc
enc.

DPN
Care 1 of 4

Chlorides
Sp. Conductance
Temp

Water Date
Bearing colored
Depth Fm. ↓

Ownership
#

record #
#

Record #	Ownership #	Water Date	Bearing	Depth Fm.	Color	Sp. Conductance	Temp	Chlorides	DPN					
17468	DP	0	PRC	76/11/01	SED	STK	195.29E.25.44332	3320.00	EP	94	2660	68	15-08004	
17469	DP	0	PRC	81/10/01	SED	STK	195.29E.25.44332	3320.00	THK	100	2571	0	15-08004	
17470	CP	0	PRC	85/03/14	SED	STK	195.29E.25.44332	3320.00	EP	134	2925	65	15-08004	
23695		0	PRC	89/05/09	SED	STK	195.29E.25.44332	3320.00	EP	166	3020	70	15-08004	
17471	CP	00379	0	PRC	87/03/27	SED	MOD	195.30E.10.31312	0.00	EP	124000	0	482	
17472	CP	00357	X	0	PRC	86/04/00	BLR	SRD	195.30E.24.134133	0.00	ELR300	0	482	
17473	CP	00357	X	0	PRC	86/04/00	BLR	SRD	195.30E.24.134133	0.00	ELR240	0	482	
17474	CP	00357	X	0	PRC	86/04/00	BLR	SRD	195.30E.24.134133	0.00	ELR340	0	482	
17475	CP			0	GRD	55/03/14	SED	STK	195.30E.25.12133	0.00	ELR20	0	0355	
23697				148	PRC	89/05/15	SED	STK	195.30E.28.31333	3275.00	TS146	0	0555	
17476	CP	00442	TH	00002	0	TRG	82/02/10	CEC	EXP	195.31E.25.222210	0.00	ELR270	0	0155
17477	CP			210	TRG	85/03/14	SED	DMR	195.31E.27.21121	3460.00	EP	0	0355	
17478	CP			177	TRG	81/10/14	SED	SRD	195.31E.27.214132	3477.00	EP	0	0455	
17479	CP			230	TRG	86/05/01	SED	DMR	195.31E.28.33124	3464.00	0	X	0785	
17480	CP			270	TRG	81/07/25	SED	STK	195.31E.28.33600	3455.00	EP	0	282	
17481	CP			190	TRG	27/01/25	USB	DMR	195.31E.28.334332	3442.00	EP	0	0555	
17482	CP			137	TRG	86/05/01	USB	STK	195.31E.28.334334	3443.00	0	X	0785	
17483	CP			137	TRG	86/07/24	SED	STK	195.31E.28.334334	3443.00	YI	0	0555	
17484	CP			137	TRG	85/03/14	SED	STK	195.31E.28.334334	3443.00	TS110	65	0455	
17485	CP			0	PTA	85/07/26	CEC	GIL	195.31E.32.221411	0.00	OTH	0	0155	
17486	CP			250	TRG	87/11/25	DMR	PPP	195.31E.33.14222	3457.00	EP	0	155	
17487	CP			185	TRG	89/11/18	DMR	PPP	195.31E.33.142224	3455.00	EP	0	187	
17488	CP			185	TRG	89/11/20	DMR	PPP	195.31E.33.142224	3455.00	EP	0	187	
17489	CP			185	TRG	81/07/29	SED	PPP	195.31E.33.142224	3455.00	EP	0	282	
17490	CP	00641	TH	00004	0	TRG	82/02/13	CEC	EXP	195.31E.36.14114	0.00	ELR260	0	0155
17491	CP			800	TRG	88/12/09		STK	195.32E.08.22411	3644.00	0	X	25-12201	
17492	CP			800	TRG	85/11/15	SED	STK	195.32E.08.22411	3644.00	EP	0	25-12201	
17493	CP			800	TRG	81/09/24	SED	STK	195.32E.08.22411	3644.00	EP	0	25-12201	
17494	CP			800	TRG	85/03/13	SED	STK	195.32E.08.22411	3644.00	EP	0	25-12201	
17495	CP	00540	TH	00001	0	TRG	82/02/10	CEC	EXP	195.32E.19.224431	0.00	ELR250	0	0185
17496	CP	00639	TH	00002	0	TRG	82/02/12	CEC	EXP	195.32E.20.134423	0.00	ELR350	0	0184
17497	CP	00071		850	TRG	83/02/15	CEC	DMR	195.33E.18.133223	3435.00	EP	0	1084	
17498	CP			100	BAL	76/08/17	CEC	DMR	195.33E.26.42221	3605.00	EP	0	0279	
17499	CP			100	BAL	76/01/16	CEC	STK	195.33E.26.42221	3608.00	EP	0	1084	
17500	CP			101	BAL	85/11/17	SED	STK	195.33E.26.422221	3608.00	YI	0	25-12195	
17501	CP			101	BAL	72/09/25	USB	DMR	195.33E.26.422221	3609.00	EP	0	0279	
17502	CP			101	BAL	76/08/20	SED	STK	195.33E.26.422221	3608.00	EP	0	25-12195	
17503	CP			101	BAL	76/10/08	SED	STK	195.33E.26.422221	3608.00	YI	0	25-12195	
17504	L			0	TRG	79/10/23	SED	STK	195.34E.03.41213	3768.00	EP	0	25-12201	
17505	L			0	TRG	84/07/18	SED	STK	195.34E.03.41213	3958.00	EP	0	25-12201	
17506	CP			33	BAL	88/12/09	SED	STK	195.34E.09.24231	3970.00	EP	0	25-12202	
17507	CP			33	BAL	79/10/16	SED	STK	195.34E.09.24231	3980.00	EP	0	25-12202	

XII

I, George R.S. Buehler, affirm Anadarko's geological and engineering departments have reviewed the available geological 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.

Affirmed this day October 11, 1991

By George R.S. Buehler
Staff Production Engineer

**WELLSITE SURFACE OWNER AND OFFSET OPERATORS TO
EXXON FEDERAL SWD NO. 1**

Surface Owner

USA
Carlsbad Resource Area
P. O. Box 1778
Carlsbad, New Mexico 88220

Offset Operators

19S-33E

- Sec. 18 SW/4 SW/4 (Lot 4)
Centennial
Box 1837
Roswell, New Mexico 88202
- Sec. 18 Lot 3, E/2 SW/4, SE/4 and E/2 NE/4 Sec. 19
Francis H. Hudson
616 Texas Street
Fort Worth, Texas 76102
- Delmar H. Lewis
616 Texas Street
Fort Worth, Texas 76102
- Edward R. Hudson, Jr.
1000 First National Bldg.
Fort Worth, Texas 76102
- Sec. 19 Lot 1 & 2 W/2 NE/4 & E/2 NW/4 and SE/4 SE/4 Sec. 13-19S-32E
Exxon Company, USA
P. O. Box 1600
Midland, Texas 7902-1600
- Sec. 19 Lots 3 & 4, E/2 SW/4 & SE/4
Firo Corporation
P. O. Box 8148
Roswell, New Mexico 88202
- Partco, Inc.
P. O. Drawer R
Artesia, New Mexico 88210
- Edward R. Hudson
616 Texas Street
Fort Worth, Texas 76102
- William A. Hudson
616 Texas Street
Fort Worth, Texas 76102

XIII
(Continued)

WELLSITE SURFACE OWNER AND OFFSET OPERATORS TO
EXXON FEDERAL SWD NO. 1

Harvey E. Yates Co.
P. O. Box 1933
Roswell, New Mexico 88202

19S-32E

Sec. 24 NE/4
Anadarko Petroleum Corporation
P. O. Box 2497
Midland, Texas 79702

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of _____

One weeks.
Beginning with the issue dated

Oct. 1, 1991
and ending with the issue dated

Oct. 1, 1991

Kathi Bearden
General Manager

Sworn and subscribed to before

me this 8 day of

Oct, 1991
Paula Parrish
Notary Public.

My Commission expires _____

Aug. 5, 1995
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
October 1, 1991
NOTICE OF WATER DISPOSAL WELL
Anadarko Petroleum Corporation, P.O. Drawer 130, Artesia, New Mexico 88210, phone 505/748-3368, contact person - Mr. Jerry E. Buckles, has made application for a water disposal well with the NMOCC. The currently plugged and abandoned Hudson & Hudson Inc. Saunders "A" No. 1 will be re-entered and deepened. Located 660 feet from the north line and 1980 feet from the west line of section 19, township 19 south, range 33 east, Lea County, New Mexico. Disposal will be into the capitan reef through an openhole completion 2500 feet to 4000 feet. Maximum rate and pressures are anticipated to be 1000 BWPD and 1800 psi. Interested parties must file objections or a request for a hearing with the New Mexico Oil Conservation Commission, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days of this notice.

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to:
 USA
 Carlsbad Resource Area
 P O Box 1778
 Carlsbad New Mexico 88220

4. Article Number
 P-567 722 899

Type of Service:
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Addressee's Address (ONLY if requested and fee paid)

6. Signature - Address
 X

7. Signature - Agent
 X *Betty Hill*

8. Date of Delivery

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P-567 722 899
 RECEIPT FOR CERTIFIED MAIL

USA
 Carlsbad Resource Area
 P O Box 1778
 Carlsbad New Mexico 88220

Postage 2.98
 Certified Fee 1.00
 Restricted Delivery Fee 1.00

PS Form 3800, June 1985

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to:
 Centennial
 Box 1837
 Roswell New Mexico 88202

4. Article Number
 P-567 722 900

Type of Service:
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Addressee's Address (ONLY if requested and fee paid)

6. Signature - Address
 X

7. Signature - Agent
 X *Roman*

8. Date of Delivery

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P-567 722 900
 RECEIPT FOR CERTIFIED MAIL

Centennial
 Box 1837
 Roswell New Mexico 88202

Postage 2.98
 Certified Fee 1.00
 Restricted Delivery Fee 1.00

PS Form 3800, June 1985

SENDER: Complete Items 1 and 2 when additional services are desired, and complete Items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge)
2. Restricted Delivery (Extra charge)

3. Article Addressed to: Francis H Hudson 616 Texas Street Fort Worth Texas 76102	4. Article Number P-567 722 901 Type of Service: <input checked="" type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>W. Clarke</i>	
7. Date of Delivery OCT 17 1991	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P-567 722 901
RECEIPT FOR CERTIFIED MAIL
NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES
See Reverse

U.S.G.P.O. 153-506

PS Form 3800, June 1985

Sent to Francis H Hudson	
Street and No. 616 Texas Street	
P.O. Station and ZIP Code Fort Worth Texas 76102	
Postage	.98
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt for Merchandise (to whom and date delivered)	1.00
Return Receipt for Merchandise (date and address of return)	
TOTAL Postage and Fees	2.98
Postmark or Date	

SENDER: Complete Items 1 and 2 when additional services are desired, and complete Items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge)
2. Restricted Delivery (Extra charge)

3. Article Addressed to: Delmar H Lewis 616 Texas Street Fort Worth Texas 76102	4. Article Number P-567 722 902 Type of Service: <input checked="" type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>W. Clarke</i>	
7. Date of Delivery OCT 17 1991	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P-567 722 902
RECEIPT FOR CERTIFIED MAIL
NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES
See Reverse

U.S.G.P.O. 153-506

PS Form 3800, June 1985

Sent to Delmar H Lewis	
Street and No. 616 Texas Street	
P.O. Station and ZIP Code Fort Worth Texas 76102	
Postage	.98
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt for Merchandise (to whom and date delivered)	1.00
Return Receipt for Merchandise (date and address of return)	
TOTAL Postage and Fees	2.98
Postmark or Date	

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Edward R. Hudson Jr 616 Texas Street Fort Worth, Texas 76102	4. Article Number P 143 463 010 Type of Service: <input checked="" type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid) <i>[Signature]</i>
6. Signature - Agent X <i>[Signature]</i>	
7. Date of Delivery OCT 23 1991	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P 143 463 010

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 See Reverse

Edward R. Hudson Jr
 616 Texas Street
 Fort Worth, Texas 76102

1.00
 2.98



PS Form 3800, June 1985

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Exxon Company USA P O Box 1600 Midland Texas 79702-1600	4. Article Number P-567 722 904 Type of Service: <input checked="" type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>[Signature]</i>	
7. Date of Delivery OCT 14 1991	

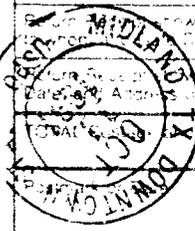
PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P-567 722 904

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 See Reverse

Sent to Exxon Company USA	
Street and No. P O Box 1600	
P.O. Station and ZIP Code Midland Texas 79702	
Postage	0.98
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Fee	1.00
Postage and Fees	2.98



PS Form 3800, June 1985

SENDER: Complete Items 1 and 2 when additional services are desired, and complete Items 3 and 4.
 Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge)
 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Firo Corporation P O Box 8148 Roswell New Mexico 88202	4. Article Number P-567 722 905 Type of Service: <input checked="" type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Addressee X <i>Ilma M. Donald</i>	8. Addressee's Address (ONLY if requested and fee paid) _____ _____ _____ _____
6. Signature - Agent X <i>Ilma M. Donald</i>	
7. Date of Delivery 10/12/85	

PS Form 3811, Mar. 1985 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P-567 722 905
 RECEIPT FOR CERTIFIED MAIL
 NO ASSURANCE OF DELIVERY
 NOT FOR INTERNATIONAL MAIL
 See Reverse

U.S.G.P.O. 1533-506

Sent to Firo Corporation Street and No. P O Box 8148 Post Office and City Roswell New Mexico 88202	
Postage Certified Fee Special Delivery Fee Restricted Mail Fee Return Receipt for Merchandise Date and Time of Delivery TOTAL Postage and Fee Postmark or Date	 .98 1.00 1.00 2.98

PS Form 3800, June 1985



The copy of the permit sent to Partco, Inc. was returned by the postal service marked (ATTEMPTED NOT KNOWN). Anadarko attempted to locate Partco, Inc. through both the Artesia City Hall and the Artesia Chamber of Commerce. Anadarko believes Partco, Inc. no longer exists.

P-567 722 906
 RECEIPT FOR CERTIFIED MAIL
 NO ASSURANCE OF DELIVERY
 NOT FOR INTERNATIONAL MAIL
 See Reverse

U.S.G.P.O. 1533-506

Sent to Partco Inc Street and No. P O Drawer R Post Office and City Artesia New Mexico 88210	
Postage Certified Fee Special Delivery Fee Restricted Mail Fee Return Receipt for Merchandise Date and Time of Delivery TOTAL Postage and Fee Postmark or Date	 .98 1.00 1.00 2.98

PS Form 3800, June 1985



SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge)
 2. Restricted Delivery (Extra charge)

3. Article Addressed to:
 William A. Hudson
 616 Texas Street
 Fort Worth, Texas 76102

4. Article Number
 P 143 463 011

Type of Service:
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Address
 X

6. Signature - Agent
 X *[Signature]*

7. Date of Delivery
 OCT 23 1991

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P 143 463 011

RECEIPT FOR CERTIFIED MAIL

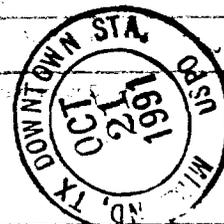
William A. Hudson
 616 Texas Street
 Fort Worth, Texas 76102

.98
 1.00

1.00

2.98

PS Form 3800, June 1987



SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge)
 2. Restricted Delivery (Extra charge)

3. Article Addressed to:
 Harvey E Yates
 P O Box 1933
 Roswell New Mexico 88202

4. Article Number
 P-576 722 914

Type of Service:
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Address
 X

6. Signature - Agent
 X *[Signature]*

7. Date of Delivery
 10-15-91

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P-567 722 914

RECEIPT FOR CERTIFIED MAIL

Sent to:
 Harvey E Yates
 Street and No.
 P O Box 1933
 P.O. State and ZIP Code
 Roswell New Mexico 88202

.98
 1.00

1.00

2.98

U.S.G.P.O. 153-806

PS Form 3800, June 1985

Postage and Fees:
 Certified Fee
 Special Delivery Fee
 Restricted Delivery Fee
 Return Receipt for Merchandise
 Total Postage and Fees

Postmark or Date

