

Earl R. Bruno

OIL CONSERVATION DIVISION
RECEIVED

AUG 9 1991

August 12, 1991

Oil Conservation Commission
P.O. Box 2088
State Land Office Bldg.
Santa Fe, New Mexico 87501

RE: State I #3
Injection Application

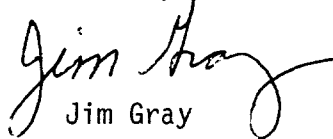
Gentlemen:

Enclosed is an Injection Application for the State I #3 well along with attachments.

I have not enclosed a copy of the newspaper application or certified receipts from offset operators. I will forward these to you upon my receipt of them.

If there are any questions, please contact me.

Thank you,


Jim Gray

State I #3

Champlin Sec. 4, T 8 S, R 33 E
 State 4 #2

1980 FNL & 1980 FWL
8 5/8 @ 368 250sx
4 1/2 @ 4431 325sx
San Andres Perfs 4189-4405
P & A
CIBP @ 4100' 4sx Plug
4 1/2 cut @ 1100'
Set plug 992-1169 Tag @ 1051
70sx 300-424 Tag @ 300
10sx surface

Chambers & Kennedy Champlin State #1

1980 FWL & 660 FSL
8 5/8 @ 361 250sx
4 1/2 @ 4438 375sx
San Andres Perfs 4251-4304
P & A
Spot 25sx Tap @ 4000'
4 1/2 cut @ 1215'
Set plug 1115-1215
25sx 283-370
10sx surface

Western States ARCO State #1

1980 FNL & 1980 FEL
8 5/8 @ 321 250sx
4 1/2 @ 4415 150sx
San Andres Perfs 4251-4379
P & A
25sx 3970-4238
4 1/2 cut @ 2500
25sx @ 2000
50sx 261-381
10sx surface

Chambers & Kennedy ARCO State #1

2310 FSL & 1980 FEL
8 5/8 @ 374'
4 1/2 @ 4420
San Andres Perfs 4229-4401
P & A
Set CIBP @ 3750 540' cement cap
50sx 1825-2012
4 1/2 cut @ 973
40sx 869-1027
50sx 296-432
20sx surface

Chambers & Kennedy ARCO State #2

900 FSL & 1980 FEL
8 5/8 @ 380
4 1/2 @ 4436 TOC 3380
San Andres Perfs 4246-4358
P & A
40sx 3845-4071
40sx 1803-2023
4 1/2 cut @ 1330
40sx 1231-1383
50sx 263-428
15sx surface

Champlin State 4 #4

1980 FNL & 660 FEL
8 5/8 @ 1928 850sx
4 1/2 @ 4504 300sx
San Andres Perfs 4245-4346
P & A
CIBP @ 4100 & 4sx
4 1/2 cut @ 2000'
60sx 1837-2060 Did not tag.
80sx 1760-2010
10sx surface

Champlin State 4 #1

660 FNL & 1980 FWL
8 5/8 @ 351 200sx
4 1/2 @ 4418 375sx
San Andres Perfs 4216-4398
P & A
Set CIBP @ 4100 & 4sx
25sx 901-1264
Cut casing @ 326'
50sx 185-416
10sx surface

Earl Bruno State I #1

660 FNL & 660 FWL
8 5/8 @ 367 190sx
4 1/2 @ 4500 350sx
San Andres Perfs 3995-4384
SI Producer

Earl Bruno State I #2

1980 FNL & 660 FWL
8 5/8 @ 368 200sx
4 1/2 @ 4478 350sx
San Andres Perfs 4249-4392
Producer

Earl Bruno State I #4

1980 FSL & 660 FWL
8 5/8 @ 1895 850sx
4 1/2 @ 4485 300sx
San Andres Perfs 4227-4403
Producer

MC & Dale Gandy Sec. 9, T 8 S, R 33 E
Ann Davis #1

1980 FWL & 660 FNL
8 5/8 @ 372 225sx
4 1/2 @ 4440 350sx
San Andres Perfs 4250-4321
P & A
Set CIBP @ 4175 & 5sx
Perf 4 1/2 @ 422' Squeeze 100sx
10sx surface

Bristol Sec. 5, T 8 S, R 33 E
 State 5-8-33 #10

8 5/8 @ 1938 850sx
4 1/2 @ 4448 250sx
San Andres Perfs 4221-4361
Producer

MC & NALE GANNY
ANNIE DAVIS #1

10 SX SURFACE

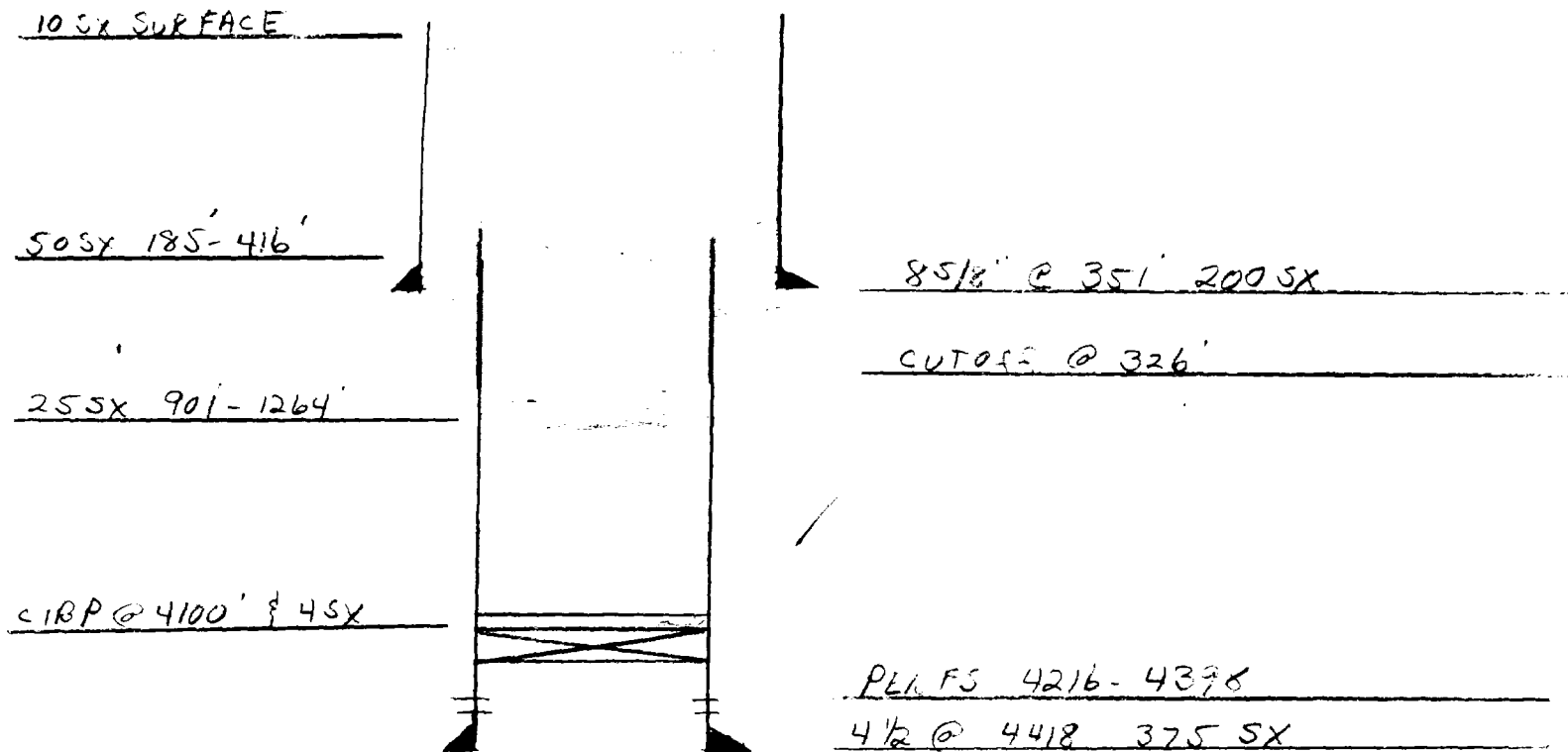
PERF 4 1/2" @ 422'
SQUEEZE 100 SY

8 5/8" @ 372' 225 SX

CIBP @ 4175' 5 SX

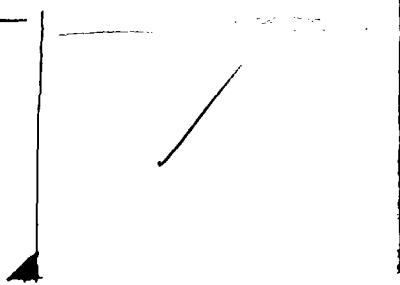
4 1/2" @ 4440 @ 350 SX

CHAMPLIN
STATE 4 #1



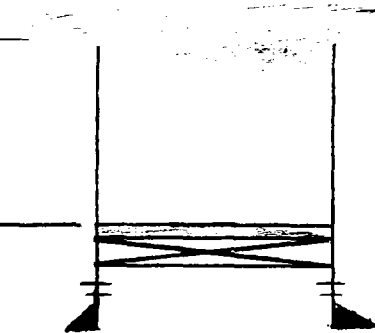
CHAMPLIN
STATE 4 #4

10 SX SURFACE



8 5/8" @ 1928' 850 SX

140 SX TOP @ 1760'



CUTOFF 2000'

CIBP @ 4100' 4 SX

PERFS 4245' - 4346'

4 1/2" @ 4504' 300 SX

C&K PETROLEUM
ARCO STATE #2

15 SX @ SURFACE
50 SX 263' - 428'

8 5/8" @ 380' CIRCULATED

40 SX 1231' - 1383'

CUTOFF 1330'

40 SX 1803' - 2023'

40 SX 3845' - 4071'

PERFS 4246 - 4358
4 1/2" @ 4436 TOC 3380'

C & K PETROLEUM
ARCO STATE #1

20 SX SURFACE

50 SX 296' - 432'

8 5/8" @ 374' CIRCULATED

40 SX 869' - 1027'

50 SX 1825' - 2012'

CIBP @ 3750' & 40' CMT

CUTOFF 973'

PERFS 4229 - 4401

4 1/2" @ 4420' ? SX

WESTERN STATES
ARCO STATE #1

10 SX SURFACE

50 SX 261-381

25 SX 2000

25 SX 3970-4238

85/8" @ 321' 250 SX

CUTOFF 2500'

PERFS 4251' - 4379'

4 1/2" @ 4415' 150 SX

10 SX SURFACE

70 SX 300' - 424'

8 5/8" @ 368' 250 SX

Plug 992' - 1169'

CUTOFF 1100'

CIBP @ 4100' & 4 SX

PERFS 4189' - 4405'

4 1/2" @ 4431' 325 SX

CHAMBERS & KENNEDY
CHAMPLIN STATE #1

10 SX SURFACE

25 SX 283'-370'

100' PLUG 1115'-1215'

25 SX TOP @ 4000'
PERFS 4251'-4304'

8 5/8" @ 361' 250 SX

4 1/2" CUT OFF @ 1215'

4 1/2" @ 4438' 375 SX



RESEARCH AND DEVELOPMENT

Report No: _____
Date: 8-14-91
County: Chaves, New Mexico
Field: Sec. 4, T8S, R33W
Formation: _____
Lease: State I
Well: _____

Company: EARL R. BRUNO
Permian Resources
Address: P.O. Box 590
Midland, Tx. 79702
Attention: Jim Gray
Date Sampled: _____

WATER ANALYSIS

Specific Gravity:	<u>1.0</u>	pH:	<u>7.0</u>
Chloride:	<u>1000 mg/l</u>	Calcium:	<u>80 mg/l</u>
Bicarbonate:	<u>366 mg/l</u>	Magnesium:	<u>20 mg/l</u>
Sulfate:	<u>330 mg/l</u>	Total Iron:	<u>1 mg/l</u>
Sulfide:	<u>none detected</u>	Sodium:	<u>760 mg/l</u>
Total Hardness:	<u>300 mg/l</u>	Total Dissolved	
(As CaCO ₃)		Solids:	<u>2760 mg/l</u>
Resistivity:	<u>0.3</u>	Ohm Meters @:	<u>75 deg. F</u>

Sample Source: _____

Remarks:

SAMPLE TAKEN FROM WATER WELL
SOUTH OF STATE I #1 AS INDICATED
ON MAP

Analyst: B. Whitman

Smith Representative: R. Cramer

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: EARL R BRUNO
Address: P.O. Box 590 MIDLAND TEXAS 79702
Contact party: JIM GRAY OR RANDY BRUNO Phone: 915-685-0113
- 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: J E GRAY Title: ENGINEER
Signature: J E Gray Date: 8-12-91
- * 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.

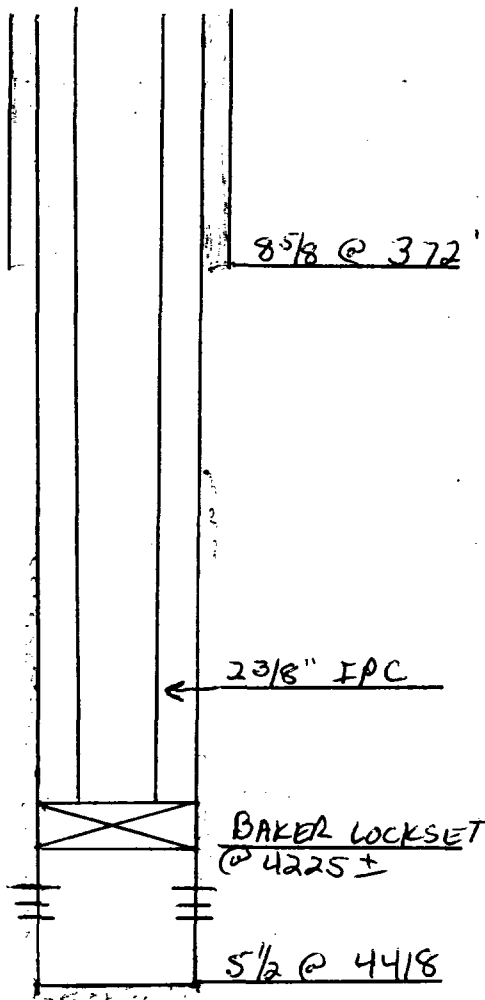
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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.

INJECTION WELL DATA SHEET

OPERATOR EARL R. BRUNO LEASE STATE I
 WELL NO. 3 FOOTAGE LOCATION 1980' FSLFFWL SECTION 4 TOWNSHIP 8S RANGE 33E
CHAVES COUNTY NEW MEXICO

Schematic



Tabular Data

Surface Casing

Size 8 5/8 " Cemented with 150 sx.
 TOC SURFACE feet determined by CIRCULATION
 Hole size 11 "

Intermediate Casing

Size _____ " Cemented with _____ sx.
 TOC _____ feet determined by _____
 Hole size _____

Long string

Size 5 1/2 " Cemented with 330 sx.
 TOC 2700 feet determined by CALCULATED
 Hole size 11
 Total depth 4418

Injection interval

4271 feet to 4349 feet
 (perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with PLASTIC set in a
 (material)
BAKER LOCKSET packer at 4225 feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation SAN ANDRES
- Name of Field or Pool (if applicable) CHAUEROO
- Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? PRODUCER OF OIL & GAS
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. NONE

State I #3

- VII. 1.) Average Injection rate of 500bbls/day with maximum rate of 1000bbls/day.
- 2.) The system is closed.
- 3.) Average Injection pressure of 1500 PSI and maximum pressure of 1500 PSI.
- 4.) Water will be re-injected produced water.
- VIII. a.) Fluid to be injected into San Andres Formation. This is a Dolomitic formation occurring @ a depth of 4271 - 4349, a thickness of 78'.
- b.) Territory waters occurs above the Redbeds. Base of Redbeds is @ 1750'.
- IX. No stimulation.
- X. Electric Log submitted upon completion in 4/30/69.
- XII. I have found no physical or geological evidence that would allow the migration of injected fluids into the fresh water zones.

OIL CONSERVATION DIVISION
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SEP 8 1991

91 01

PERMIAN RESOURCES INCORPORATED

September 3, 1991

Oil Conservation Commission
P.O. Box 2088
Santa Fe, NM 87501

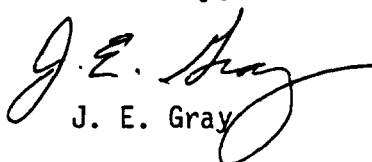
Re: J.H. McClure B22
S-19 T-24S R38E
Lea County, NM
State I #3
S-4 T-8S R33E
Chaves County, NM

Gentlemen:

I am enclosing a copy of the newspaper publication attachment on the above two wells.

If you have any further questions, please call.

Sincerely,


J. E. Gray

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

August 16, 1991
and ending with the issue dated

August 16, 1991

Kathi Bearden
General Manager

Sworn and subscribed to before

me this 28 day of

Aug, 1991

Paula Parris
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
August 16, 1991

Application has been made with the OCC to convert the State I #3 well to disposal. The location is 1980' FWL of Section 4, T 8 S, R 33 E, Chaves County, New Mexico.

Water will be injected into the San Andres formation from 4271' to 4349'. Estimated maximum injection rate will be 1000 Bbls per day at 1500 PSI maximum volumes.

Interested parties must file objections or requests for hearing with the Oil Conservation Commission, P.O. Box 2088, Santa Fe, New Mexico, 87501, within 15 days.

Earl R. Bruno

August 14, 1991

Notice of our intentions to convert the State I #3 to water injection was sent to the below listed on August 14, 1991:

State of New Mexico
P.O. Box 1148
Santa Fe, New Mexico 87501

Bristol Resources
6655 S. Lweis Ave.
Suite 200
Tulsa, Oklahoma 74136

Murphy Operating
Box 2648
Roswell, New Mexico 88201



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

OIL CONSERVATION DIVISION
RECEIVED

'91 AUG 23 AM 9 07

8-20-91

BRUCE KING
GOVERNOR

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

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

RE: Proposed:

MC _____
DHC _____
NSL _____
NSP _____
SWD X _____
WFX _____
PMX _____

Gentlemen:

I have examined the application for the:

Earl R. Brune State I #3-K 4-8-33
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed